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Aspects of the Extent and Effectiveness of Career Guidance and Career Education in Illinois Public Schools, Grades 1-12

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ASPECTS OF THE EXTENT AND EFFECTIVENESS OF CAREER GUIDANCE AND CAREER EDUCATION IN ILLINOIS PUBLIC SCHOOLS, GRADES 1-12

(TITLE)

BY

KENNETH G. PRILLAMAN

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I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
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INTRODUCTION

OVERVIEW

Education has become the United States' largest enterprise. This nation now spends over $85 billion a year, or about eight percent of the gross national product on education.[1] Per pupil costs exceed $1,000 a year, to make an average total expenditure of between $12,000 and $13,000 to get each youngster through the first twelve grades.[2] National expenditures are staggering. Yet of the 3.7 million young people leaving school in 1970-1971, nearly 2.5 million lacked skills adequate to enter the labor force at a level commensurate with their academic and intellectual aptitudes.[3] It has been estimated that these 2.5 million students, leaving school at various levels, cost the nation upwards of $30 billion, or about 1/3 of the total amount spent on education in this country last year.[4] It appears that we are spending billions of dollars to prepare 2.5 million young people for potential disenchantment, unemployment, loss of self-confidence, alienation, aimlessness and failure--year after year.

Educators and economists alike have been actively seeking ways to revamp our public school system to remedy the aforementioned problems. Both have come to agree that career education and career guidance may offer an answer. It is the intent of this paper to

explore the extent and effectiveness of career guidance and career education in Illinois public schools, grades 1-12, as indicated by a random sampling of Eastern Illinois University students.

To an economist, employment is the ultimate goal of training, whether it be of an educational or techincal nature. Therefore, the study will be most concerned with this aspect of career education and career guidance.

THE EXTENT OF UNEMPLOYMENT AND UNDEREMPLOYMENT (NATIONAL AND STATE LEVELS)

UNEMPLOYMENT

Unemployment and underemployment of American labor constitutes the greatest waste of productive factors in the United States today. The national unemployment rate for 1972 was 5.9%. In actual numbers this means that 4,993,000 American workers were seeking work that could not be found.[5] The lost productive capacity of these workers is gone forever. Illinois had an unemployment rate of 4.7% or 235,000 workers out of work in 1972.[6]

The causes of unemployment are usually categorized into four broad areas: cyclical, seasonal, structural, and frictional. The latter two are of primary importance to this paper.

Structural unemployment arises from basic changes in the labor demand and failure of the labor supply to accommodate to new market conditions.[7] It usually appears in three different forms.

1. Skill mismatch--Workers either have no marketable skills, or are trained for jobs which do not exist. This type of mismatch

is especially exemplified today by the saturated teaching profession. Of those 1972 graduates and alumni who registered with the Eastern Illinois University Placement Office for teacher placement, only 55% were actually placed in a teaching position.[8] This figure is down from 75% placement in 1969, just three years ago. The remaining 45% of teacher placement registrants have either been forced to seek alternative routes to employment, or are unemployed. These individuals have been trained for jobs that simply do not exist; their skills are mismatched with the existing job market.

2. Geographical mismatch--This mismatch occurs when trained individuals are unemployed in one part of the nation, or even a state, while jobs are available in another geographical area.

3. Occupational mismatch--Occupational mismatch may be becoming the most important labor problem in our country today. This situation exists when a worker is in a vocation for which he is unsuited, either in aptitude or interest. Worker dissatisfaction is on the upswing. In the automobile industry, absenteeism has increased as much as 100% in the past ten years.[9] Turnover rates are climbing despite rising wage levels. An accountant who has a greater aptitude and interest in carpentry would probably be happier and thus more productive as a carpenter.

Structural unemployment is clearly a very serious problem in our economy today. Depending on the economic condition of the nation, and thus the amount of cyclical unemployment (more cyclical unemployment in a downswing and less in an upswing), structural unemployment can account for as much as 30% of the total unemployment in a down-

swing, and approximately 13% in an upswing.[10] In actual figures, this means that somewhere between 649,090 and 1,497,900 workers on the national level and 30,550 to 70,500 workers in Illinois were out of work in 1972 due to structural unemployment.

Frictional unemployment, once again depending on the condition of the economy and thus cyclical unemployment, can account for as much as 58% in an upswing or as little as 42% of total unemployment in a downswing.[11] In actual numbers of workers, frictional unemployment was the cause for between 2,895,940 to 1,497,900 workers on the national level and 136,300 to 98,700 workers in Illinois to be out of work in 1972. Frictional unemployment results from temporary difficulties in matching workers with available jobs.[12] If a worker has been fired or quit his job and is presently in the process of seeking new work, he is considered to be frictionally unemployed. Usually unemployment of five weeks or less is considered frictional. If unemployment exceeds five weeks it is usually attributed to one of the other three causes.

UNDEREMPLOYMENT

In terms of the actual numbers of workers affected, underemployment may in truth be a more serious problem than unemployment. There are two types of underemployment. The first type exists when workers are not working the number of hours they prefer, through no fault of their own. In other words, a worker who is ready and willing to work full time is forced to accept part-time employment due to conditions beyond his control. The second type exists when a worker is

employed in a job which does not fully utilize his intellectual or technical capabilities. This type of underemployment is very common, especially in the case of college-educated labor. It is quite common for an individual with a bachelor's degree, master's degree or even Ph.D. degree to be unable to find work in his chosen field and thus be forced to accept alternative employment.

At this point in time there are no official figures available as to the actual extent of underemployment. The problems involved in researching and obtaining such data seem nearly insurmountable. However, it has been estimated that as much as 10% of the American labor force may be underemployed. The total U.S. civilian labor force for 1972 tallied approximately 85,324,000 workers. These figures indicate that over 8½ million workers may have been employed below their productive potentials in 1972. Illinois alone had nearly 500,000 workers underemployed.[13] If these estimates are valid, then underemployment touches more than twice as many Americans than are affected by unemployment.

HIGH SCHOOL DROPOUT RATE

Very few people realize that nearly 25% of all young Americans do not finish high school. Dropout rates have improved in recent years, but research for 1971 still indicated that 20.6% of those public school students entering ninth grade in 1967 did not graduate from high school in 1971.[14] Illinois sported a dropout rate of 20.4%.[15] In an economy in which the vast majority of laborers have high school diplomas, it is very easy for employers to use a high school education as a screening

device. Oftentimes this screening is automatic, hence, the high school dropout is not even considered for employment. Thus, those who fail to complete high school invariably find themselves in the rear of the labor market queue; to them the cliche applies, "last hired and first fired."[16]

Students drop out of high school for a myriad of reasons, but the following three are very common: boredom, disinterest in academics and general irrelevancy of education to the world of work. Economic conditions, seemingly the most logical cause for leaving high school, are surprisingly very seldom given as the reason for dropping out.

THE IMPORTANCE OF CAREER GUIDANCE AND CAREER EDUCATION (CG/CE) AS POSSIBLE REMEDY FOR STRUCTURAL AND FRICTIONAL UNEMPLOYMENT, UNDER-EMPLOYMENT, AND HIGH SCHOOL DROPOUT PROBLEM

A discussion of career guidance and career education must begin with comprehensive definitions of the terms. The definitions I used for my study and research were self-devised. Career guidance is the steering of students into occupations for which they are well-suited (both in aptitude and interest), and into occupations with good future employment prospects. It should include career education, which entails the education of students as to the natures of various occupations, the required qualifications for various occupations and the employment prospects for various occupations. It is not to be mistaken for vocational education, such as shop, agriculture, home economics, etc. This definition appeared on the questionnaire distributed to the Eastern Illinois University students, on the

questionnaires sent to the Office of the Superintendent of Public Instruction (O.S.P.I.) officials in Springfield, and was given to all interviewees prior to the interview. Career education differs from vocational education, according to my interpretation, in that career education merely teaches the student about different occupations, while vocational education actually trains the student in the skills needed for a particular occupation. Vocational education, while independent, is strongly related to career education. Subsequent to a student's receiving career education and choice of an occupational area, he should enter a vocational education program to learn the specific skills required for that occupational area.

Dr. Sidney P. Marland Jr., the current United States Commissioner of Education, expressed this view about career education:

> It is clear that career education is not a synonym for vocational education, or for academic, or pre-college, or general education. Rather, it is a blending and restructuring of all of these into an entirely new curriculum with vocational and occupational skill training playing a new, key role. The fundamental concept of career education is that all educational experiences, curriculum instruction, and counseling must be geared to preparation for economic independence, personal fulfillment, and an appreciation for the dignity of work.[17]

Dr. Marland is so convinced of the urgent need for career education that in his first major address after becoming the U.S. Commissioner of Education he called for the immediate abolition of the general education curriculum and its replacement by career education.[18] When asked why he was so adamant about the need for career education, Commissioner Marland replied,

> Of every ten students in high school, two receive occupational training of some sort and three go to college (although one of these drops out). This means that more than one half of all students now in high school--1,500,000--ought to have opportunities, counseling, and attractive options in occupational training. The existing system and the attitudes of administrators, young people and their parents, foreclose these conditions in most schools.[19]

President Richard Nixon apparently shares Commissioner Marland's interest in career education. In his 1973 State of the Union Address, the President recommended that major emphasis this year be placed on career education.[20] The President went on to state, "Too often vocational education is foolishly stigmatized as being less desirable than academic preparation, and too often the academic curriculum offers very little preparation for viable careers."[21] President Nixon defined career education as,

> ....a plan to provide people of all ages with broader exposure to and better preparation for the world of work. Career education is a concept leading to the achievement of a major goal for education. It begs development and implementation.[22]

To further affirm his interest in career education, the President went on to propose the addition of fifty-five million dollars to the 1973 federal education budget to introduce the concept of career education. The stated purpose of these funds (which were ultimately appropriated) was to make education at all levels more relevant to the world of work.[23]

Donald Super, a recognized leader in the field of guidance, offers this definition of career or vocational guidance,

> A program to acquaint the individual with various ways in which he may discover the use of his natural endowment, in addition to special training available from any source so that he may live and make a living to the best

> advantages to himself and society. The process of helping a person to develop and accept an integrated and adequate picture of himself and of his role in the world of work.[24]

It is evident from the above discussion that career education and career guidance are rapidly rising to the fore in contemporary educational theory. The above definitions and others, though not identical, all stress the same desirable aspects of career education and career guidance. Career education and career guidance programs should: 1) acquaint young people with the general world of work, 2) educate students as to the natures, required qualifications and employment prospects for various occupations, 3) ascertain the student's occupational aptitudes and interests, 4) guide the student toward those occupations he is most suited for, and 5) generally make the school to work transition easier for the student.

The objectives of career guidance and career education programs should vary with the age of the student. Programs for kindergarten and grade school students should be designed primarily to simply acquaint the students with the world of work. "Hands-on" experience is stressed at this level; touching the tools of various occupations, occupational role playing and audio visual aids are suggested.[25]

At the junior high school level the primary goal is not to encourage students to select life occupations, but to acquaint them with the world of work and with broad occupational clusters.[26] In other words, students of junior high age are not yet prepared to choose their specific lifetime occupations, but they are encouraged

to investigate occupational clusters for which they show aptitude or interest. An example of an occupational cluster would be electronics. The electronics cluster may include jobs from repairmen to computer designers, yet all dealing with some aspect of electronics.

High school students should investigate occupational clusters in more depth during the freshman and sophomore years, then in the junior and senior years the students are urged to specialize in one or more occupations. Some students make their career choice as early as ninth grade, others do not decide until after they are long out of high school. But, the opportunities for career development should be made available to all students. Job placement programs are also highly recommended for high schools.

Career Guidance and Career Education as Possible Remedy for Structural Unemployment

Effective career guidance and career education programs might well be able to decrease the incidence of structural unemployment. Skill mismatch and saturated occupations may never be completely eradicated, because the labor market and the demand for labor are too unstable. This instability is clearly exemplified by the areospace industry. Throughout the 1960's and up through 1970, employment opportunities in the areospace industry were rapidly expanding. Employment prospects for the future appeared excellent for people entering the industry. Then in 1971, the federal government severely cut back on areospace expenditures and unemployment skyrocketed. The federal government cutback was an unpredicted shock to the labor market; no amount of career education or career guidance could have decreased the ensuing structural unemployment.

However, career education and career guidance can play a very important part in decreasing normal structural unemployment. Through use of employment projection sources, such as the Occupational Outlook Handbook, a high school counselor or teacher can discern the employment prospects for a particular occupation reasonably well for the following ten years. Normally, these projections are reliable. It is then a simple matter to relay these projections to the students, and guide them away from saturated occupational areas. Not all students will avoid these areas of course, some have strong ambitions for these occupations despite employment prospects. But if the borderline students will avoid these fields, then saturated occupations, such as the teaching profession, can be averted or at least decreased.

Orientation of students to the world of work and vocational education classes might entice young people to become interested in an occupation, and subsequently develop the required skills for that job, before they leave high school. In this way, students would leave school with marketable skills and a direction for employment. With the advent of comprehensive vocational education programs, fewer students would enter the labor market with no skills whatsoever.

Proper guidance again could educate students as to the geographical areas with the best employment prospects for their particular skills. Young people are highly mobile in their first few years of employment. If they could move to an area with good future employment prospects for their particular skills, before they settle down and take roots, then the traumatic experience of a crosscountry move could be avoided in later years.

Occupational mismatch may be the most difficult problem to remedy. Career aptitude and interest tests, in conjunction with personal investigation by students of various job clusters, might well guide young people into the occupations for which they are best suited. If a worker is in an occupation he is well suited for and enjoys, he will be happier and thus more productive. However, if the cause of worker dissatisfaction lies with the employer or system of production and not with the worker, then career guidance and career education programs will not be the answer.

CG/CE as Possible Remedy for Frictional Unemployment

Frictional unemployment will also never be completely eradicated. There will always be a percentage of the labor force in transition between jobs. However, the frequency of transitions and period of time involved can be decreased. Presently, most young workers go through a period of trial and error in employment, trying to find the occupation they are most suited for. If workers left high school with a knowledge of their vocational aptitudes and interests, then the trial and error procedure might well be eliminated. In actuality, these young people go through the trial and error procedure in high school while investigating various job clusters. Some experimentation is bound to take place, but the frequency might well be decreased through adequate CG/CE programs in the public schools.

Another cause of frictional unemployment stems from worker misconceptions about the world of work. Employers often complain that young workers expect unreasonably high wages and responsibilities they

are not equipped to handle. World of work orientation might well allay these misconceptions.

The teaching of job hunting tips and techniques might well be the most important aspect of career guidance in respect to decreasing frictional unemployment. If a worker knows how to hunt for a job, his employment search will probably take less time and be more successful.

CG/CE and Underemployment

Effective career guidance and career education programs should remedy saturated occupations which are often the cause of underemployment. This is a case of CG/CE as a preventive measure rather than a cure. If proper guidance had prevented the existing teacher surplus, then it would be unnecessary for trained teachers to accept alternative employment below their capabilities.

The second form of underemployment, part-time employment, is more difficult to improve. This type of underemployment is usually due to the economic circumstances of the community. However, if the worker is forced to work part-time because he lacks the skills to obtain a full-time job, then CG/CE can help him. Vocational training courses, job hunting techniques and guidance can prepare the worker in the skills necessary to maintain full-time employment.

CG/CE and Improvement of High School Dropout Situation

As previously stated, the majority of high school dropouts leave school for three reasons: 1) boredom, 2) disinterest in academics, and 3) general irrelevancy of school to the world of work. A comprehensive CG/CE program can greatly benefit the potential dropout.

Career education and especially vocational education can make high school far more interesting and relevant for the potential dropout. Instead of wasting his time on Rhetoric and Biology, the student can be training for an occupation. Counselors could guide potential dropouts into courses that hold their interest and steer them away from those courses which they find most objectionable. The student is more likely to remain in school, at least until his technical courses are completed. Even on the contingency that the student should drop out of school before he graduates, he will still be more prepared to find employment and fend for himself than he is today. An effective job placement program in the high school might prove to be a very strong force in motivating students to remain in school. "A school in which getting a job is part of the curriculum is more likely to have students who understand why reading and mathematics make a difference than a school that regards employment as somebody else's business."[27]

EXISTING PROBLEMS OF CG/CE ON NATIONAL LEVEL

Career guidance and career education on the national scene are currently plagued by a number of problems. These problems must be overcome before the nation can boast a comprehensive CG/CE system.

Implementation Problems

Before CG/CE can be implemented, the attitudes of several segments of society must be changed. A distasteful stigma seems to be attached to career education at this time. Counselors, teachers,

school administrators, parents and even students downgrade CG/CE and vocational education as a course of study only for those students who cannot make it into college.[28] This misconception may be due to ignorance, but is more likely merely an outgrowth of a college-oriented society. In any event, these attitudes must be changed before CG/CE can become a viable force in our educational system.

Insufficient in Extent

A recent study of publicly-sponsored occupational programs in twenty U.S. cities found no career or vocational guidance in 48% of the secondary schools.[29] A more comprehensive study would probably have found almost no CG/CE in junior high schools and even less in grade schools. Despite government funding and continuous publicity over the last ten years, CG/CE programs are still few and far between.

Ineffective Due to Poor Quality of CG/CE

Existing CG/CE programs are of such poor quality that very few students are actually educated in the world of work or helped in choosing an occupation or college major.

Most Counselors Incompetent in the Area of CG/CE

Dr. Eli Ginzberg, Chairman of the National Manpower Advisory Committee, suggests that most counselors are more interested in emotional or class scheduling guidance than career guidance. He posits that many counselors perfunctorily distribute printed information on various careers, most of which has not been prepared specifically for students, and often is not read by them.[30]

Career education and career guidance is a relatively new area. Many counselors have no background in this area, thus, they may be ignorant of their duties. In some cases, however, the counselors are blatantly hostile to CG/CE. Dr. Marla Peterson stated that when she was testing OCCUPAC units in public elementary schools many counselors were outwardly hostile to the career education theory. She suggested that the counselors may have felt threatened by this new concept of education about which they knew little.[31]

Differentials in CG/CE

Three differentials in the extent, quality and effectiveness of the career aid offered students are usually posited. School size can play a role in the CG/CE offered students. As might be expected, large suburban schools often offer more comprehensive programs than small rural schools.

Studies have shown career guidance to be more deficient for girls than boys.[32] Dr. Marla Peterson suggested that this differential may be due to the counselor's perception of the woman's role in society; many counselors may see women as housewives and mothers, not as career women.[33] Home economists still accounted for approximately 30% of all women in vocational education courses in 1970.[34]

A significant college bound/non-college bound student differential exists in the extent and quality of CG/CE offered. Counselors' time and efforts tend to be concentrated on helping students with college plans. Non-college bound students are often neglected. Comparatively little thought is devoted to the decision-making in

these students' lives as compared with the students bound for college. A recent national survey found secondary school counselors spending twice as much time on college-related counseling as on vocational topics.[35]

Inadequacy of Occupational Information

Dr. Eli Ginzberg, a contemporary leader in the field of guidance, finds occupational information seriously deficient. He stated that materials such as the Occupational Outlook Handbook are unsuited to the needs of high school dropouts, high school graduates who are ready to enter the labor force, and students continuing their education and training. Among their shortcomings, he finds these materials to be too general in describing the nature of specific jobs, the alternative paths into jobs, the probable limits of advancement in each field and linkages between occupations.[36] He also complains that employment and wage data are given in national aggregates rather than in detail on regional or local labor markets.[37]

Dr. Edson McKee agrees with Dr. Ginzberg. Dr. McKee's complaint was that the employment prospects are often out of date and thus misleading. He stated that the 1970 edition of the Occupational Outlook Handbook reported good employment prospects for elementary and secondary teachers. He also stated that the 1972 edition of the Occupational Outlook Handbook labeled employment prospects for guidance counselors as good, when in truth, they are below average.[38]

These men are not alone in their criticism of occupational information, yet experts are divided on the question. The majority

of guidance experts encountered in this study praised the Occupational Outlook Handbook and other sources as adequate and of great aid to counselors.

PURPOSE, ORGANIZATION, AND METHODOLOGY OF THE STUDY

PURPOSE

Hypotheses: Two major hypotheses will be investigated in the course of the study. The first hypothesis states that career education and career guidance programs in Illinois public schools, grades 1-12, are adequate in extent (existence, quality, and kinds) to prepare young people for entry into the labor market. The second hypothesis holds that career education and career guidance programs in Illinois public high schools are adequate in effectiveness in influencing young people in their choice of occupations or college majors.

The purpose of this paper is dual in nature. First, the intent is to explore the extent of career guidance and career education in Illinois public schools; as to the number of schools offering career guidance and career education programs, the quality of the programs, and the types of career guidance and career education programs offered. The second purpose of the study is to discern the effectiveness of existing career guidance and career education programs in helping students choose a suitable occupation or college major.

ORGANIZATION

This paper is basically structured to investigate and answer the following seven questions.

1. What is the extent of career guidance and career education (quantity, quality, and kinds) in Illinois public schools, grades 1-12?
2. How effective are existing high school career guidance and career education programs in helping students choose a suitable occupation or college major?
3. Does a sex differential exist in the extent and effectiveness of career guidance and career education received by students at the high school level?
4. Does a school size differential exist in the extent and effectiveness of career guidance and career education received by students at the high school level?
5. Does a college bound/non-college bound student differential exist in the extent and effectiveness of career guidance and career education received by students at the high school level?
6. Are public high school counselors competent in the areas of career guidance and career education?
7. Have career guidance and career education programs improved appreciably in extent, quality, or effectiveness in recent years?

METHODOLOGY

The primary research for the study took three forms; a student questionnaire, interviews with state school officials, and interviews with local guidance people.

The Instrument

A questionnaire, devised by the author and entitled "Career Guidance Student Questionnaire," was passed out to 250 males and 90 females in Taylor residence hall and 160 females in Lawson residence hall on the Eastern Illinois University campus. The questionnaires were distributed on Monday, July 16, 1973 and were collected on Thursday, July 19. No information was available to discern the age or class of the residents polled, however, both dormitory directors estimated the breakdown of residents by class (freshman, sophomore, junior, senior, graduate) to be approximately equal. The sampling was therefore made totally at random, with regard only to sex.

The questionnaire was comprised of 37 questions and afforded three types of information: 1) personal background data, 2) the extent of career guidance and career education in schools (quantity, quality, and kinds), grades 1-12, 3) the effectiveness of career guidance and career education programs. Comments after most questions were encouraged, with spaces provided. Follow-up phone calls were made to 23 students who indicated they had further comments to make, or whose answers the author wished to further explore. The questionnaire is reproduced in Appendix A at the back of this paper.

Of the 500 questionnaires distributed, 217 were returned; a response of 43.4%. Eighty-three of the respondents were male (38.2%) and 134 (61.8%) were female. The ages of the respondents ranged from 17 to 52. The percentage breakdown by class was as follows: Freshmen 18.9%, Sophomores 30.0%, Juniors 21.7%, Seniors 16.6%, and Graduate

students 12.9%. One hundred and sixty high schools from all over the state of Illinois were represented, ranging in size fron 150 to 5,000 students.

Statistical Design

The Chi Square contingency-table test was employed to test for relationships between the various variables. The procedure for the Chi Square test was relatively simple. First, the expected frequencies were computed from the actual frequency table.

$$\frac{\text{Column Total X Row Total}}{\text{Grand Total}}$$

This is the formula used to determine the expected frequencies.

A Chi Square value for the table was next calculated. If the table had only one degree of freedom (degrees of freedom were calculated by multiplying the number of rows -1 times the number of columns -1) then a continuity correction was employed.

$$X^2 = \sum \frac{(fo - fe)^2}{fe}$$

fo = observed frequency
fe = expected frequency

with continuity correction: $X^2 = \sum \frac{(fo - fe) - \frac{1}{2})^2}{fe}$

When the calculated X^2 was found, it was compared with the values in a table of X^2 at the different significance levels. The 0.05 significance level was employed in this study. If the calculated Chi Square exceeded the 0.05 value in the table, then the null hypothesis, that no relationship existed, was rejected and the alternative hypothesis, that a significant relationship did exist, was accepted. The nature of the relationship was not indicated by the X^2 test, that information had to be determined by examining the data.

State School Officials

Two Illinois school officials in the Office of the Superintendent of Public Instruction were contacted. A personal interview with Mr. Gary Hoffman, former director of the O.S.P.I. Division of Career Education, was held July 9, 1973 in his office in Springfield, Illinois. The interview was tape recorded, which may or may not have affected the quality of his answers.

A questionnaire was mailed to Mr. Dan Brauer, Educational Specialist II in the Pupil Personnel Section of the O.S.P.I., on July 16, 1973 and was returned, partially completed, on August 18, 1973. The questionnaire and cover letter are reproduced in Appendix B at the back of this paper.

Local Career Guidance and Career Educational Authorities

Three members of the Eastern Illinois University faculty were also interviewed. A personal interview was held with Dr. Marla Peterson, Director of the Enrichment of Teacher and Counselor Competencies in Career Education Project (K-6) Eastern Illinois University. Dr. Peterson is also the director of the OCCUPAC Project Staff and was instrumental in the development of the OCCUPAC Career Education Project. The interview with Dr. Peterson was held in her office in Buzzard Laboratory School on the Eastern Illinois University campus on August 1, 1973. The author also observed an OCCUPAC film and demonstration narrated by Dr. Peterson on August 2. The interview with Dr. Peterson was not tape recorded.

Another interview was conducted with Dr. Donald Moler, Department Chairman of the Eastern Illinois University Graduate Program in

Guidance and Counseling, in his office in the Clinical Services Building on the Eastern Illinois University campus on August 10, 1973. The interview with Dr. Moler was not tape recorded, at his request.

The final on-campus interview was with Dr. Edson McKee, instructor in the Eastern Illinois University Graduate Program in Guidance and Counseling. The author met with Dr. McKee on August 15 in his office in Coleman Hall. He had just completed teaching a course in the Graduate Program in Guidance and Counseling entitled, "Occupational, Personal and Social Information," which is the only course taught which specifically entails career education and career guidance. The interview with Dr. McKee was tape recorded, which may or may not have affected the quality of his answers.

Campbell's Thesis

A major secondary source used was a thesis for a Specialist Degree in Education at Eastern Illinois University written in August 1972, and was entitled, "The Students' Conception of the Informational Services Function at the High School Level." The nature of his thesis was to explore the extent of career education and career guidance, with special emphasis on the extent of career information, offered in Illinois public high schools. Originally, the author had planned to survey a number of high schools in Illinois to discern the extent and types of guidance programs offered, however, Mr. Campbell's study so closely coincided with that part of the author's that it was decided to use his results. His research was far more detailed and more complete than

the author's would have been in this particular area. The author originally planned to survey approximately 25 to 30 high schools; Mr. Campbell successfully contacted and obtained information from 84 high schools.

ASSUMPTIONS

It is necessary to make certain assumptions for this investigation. First, it must be assumed that the student respondents answered the questionnaires accurately and truthfully, to the best of their knowledge. Secondly, it must be assumed that the individuals interviewed answered all questions accurately and truthfully, to the best of their knowledge. Thirdly, the conclusions of this study cannot be conclusively extrapolated to the situation in Illinois as a whole. The sampling of students was much too small to validly accept their responses as indicative of the total student population of Illinois. For the purposes of this study, all conclusions will be projected to the entirety of Illinois. However, a more comprehensive investigation would be necessary to allow for absolute extrapolations to be made.

LIMITATIONS OF THE RESEARCH

1. The students involved in the sampling were all enrolled in Eastern Illinois University. Hence, no non-college young people were surveyed. It is possible, therefore, that the sampling was biased. However, it was the author's contention that in high school all students are on an equal footing. The career aid received by any one student should be indicative of the aid received by all students

in the same high school. Hence, the attitudes of a college student about his high school career aid program should be essentially the same as those of his non-college counterpart.

2. Every student did not answer every question. Resultantly, the totals in the tables vary.
3. The sampling of students was much too small to allow any valid conclusions to be drawn about Illinois as a whole. Also, too few respondents were from the same high schools, thus intraschool comparisons of answers were precluded. These comparisons would have been important in the analysis of questions such as the competency of counselors, the quality of the career aid offered and the existence of sex and college bound/non-college bound student differentials.
4. It is possible that the individuals interviewed with the aid of a tape recorder did not speak as candidly as they would have had they not been recorded. Their answers to certain opinion questions, such as the competency of counselors question, may not have been entirely frank.

FOOTNOTES

CHAPTER I

[1]Robert M. Worthington, "Why Career Education?" School Shop: Industrial-Technical Education, XXXI (March, 1972), 37.

[2]Ibid.

[3]Ibid., p. 38.

[4]Ibid.

[5]U.S. Bureau of the Census, Statistical Abstract of the United States: 1972, 93 ed. (Washington, D.C., 1972), p. 216.

[6]Ibid., p. 222.

[7]Sar A. Levitan, Garth L. Mangum, and Ray Marshall, Human Resources and Labor Market: Labor and Manpower in the American Economy (New York: Harper and Row, Publishers, 1972), p. 35.

[8]Placement Annual Report (Eastern Illinois University, School Year 1971-1972), p. 10.

[9]Neal Q. Herrick, "Who's Unhappy at Work and Why," Manpower, IV (January, 1972), 3.

[10]Levitan, Mangum, and Marshall, p. 36.

[11]Ibid.

[12]Ibid., p. 34.

[13]U.S. Bureau of the Census, p. 216.

[14]Research Division-National Education Association, "Educational Attainment," Research Report-1971: Ranking of the States, 1971 (Washington, D.C., 1971), p. 28.

[15]Ibid.

[16]Levitan, Mangum, and Marshall, p. 103.

[17]Worthington, p. 38.

[18]Sidney P. Marland, Jr., "Career Education Now," The Vocational Guidance Quarterly, XX (March, 1972), 190.

[19]Sidney P. Marland, Jr., "Career Education: Every Student Headed for a Goal," American Vocational Journal, XLVII (March, 1972), 36.

[20]Lowell A. Burket, "Career Education: How Do Others Interpret the Concept?" American Vocational Journal, XLVII (March, 1972), 9.

[21]Ibid.

[22]Ibid.

[23]Ibid.

[24]Donald Super, The Psychology of Careers (New York: Harper and Brothers, 1957), p. 197.

[25]John Cochran and Herman J. Peters, eds., Guidance: An Introduction-Selected Readings (Columbus, Ohio: Charles E. Merrill Publishing Compnay, 1972), p. 360.

[26]Robert J. Roman and Jama L. Doenges, "Career Week at McTigue Junior High," American Vocational Journal, XLVI (September, 1971), 62.

[27]"Career Preparation for Everyone," The Vocational Guidance Quarterly, XX (March, 1972), 184.

[28]Lawrence Davenport, "Career Guidance: A Call for Change," Manpower, IV (November, 1972), 11.

[29]Ibid.

[30]Eli Ginzberg, "A Critical Look at Career Guidance," Manpower, IV (February, 1972), 4.

[31]Interview with Dr. Marla Peterson, Director of the Enrichment of Teacher and Counselor Competencies in Career Education Project (K-6) Eastern Illinois University, August 1, 1973.

[32]Levitan, Mangum, and Marshall, p. 121.

[33]Interview with Dr. Marla Peterson.

[34]Levitan, Mangum, and Marshall, p. 137.

[35]Ibid., p. 121

[36]Ginzberg, p. 4.

[37]Ibid.

[38]Interview with Dr. Edson McKee, Instructor in Graduate Program for Guidance and Counseling at Eastern Illinois University, Eastern Illinois University, August 15, 1973.

CHAPTER II

THE BACKGROUND AND EXTENT OF CAREER GUIDANCE AND CAREER EDUCATION IN ILLINOIS PUBLIC SCHOOLS

It is the design of this chapter to examine the background of CG/CE in Illinois specifically, and then to determine the extent of CG/CE in Illinois public schools. Possible sex differentials, school size differentials and college bound/non-college bound student differentials in the career aid received by the students will be explored in the last section of the chapter.

BACKGROUND

Curriculum Policy

Mr. Gary Hoffman, former director of the Office of the Superintendent of Public Instruction, Division of Career Education, stated that the O.S.P.I. does have a standard curriculum policy for public schools to follow in the area of CG/CE. The 1973 document, Circular Series A 160, entitled, "The Illinois Program for Recognition, Evaluation and Supervision of Schools," which is the official guideline used by the O.S.P.I. in evaluating public schools for state funding, includes a section on career education.[1] The section states, "Every school district will address itself to the initiation of a career development program."[2] The section is not specific as to a definition of career development or the details of an adequate program. No guidelines as

to the nature of the program or the amount of time required for CG/CE each week are spelled out.[3] The intention of the O.S.P.I. was merely to encourage public schools to address themselves to the concept and start infusing it into their educational program.[4] Prior to 1973, no official guideline for CG/CE existed.

Dan Brauer, an official with the O.S.P.I., indicated that the O.S.P.I. does not have any standard curriculum policy including CG/CE. He explained, however, that the O.S.P.I. does have a career education task team which is currently developing guidelines.[5] This contradiction was the first of many to come.

The Office of the Superintendent of Public Instruction (O.S.P.I.) funds several programs for CG/CE. The Illinois Network for School Development (I.N.S.D.), a jointly-funded program by O.S.P.I. and the Division of Vocational and Technical Education (D.V.T.E.), was begun in 1972 to the tune of $100,000. Ten consortiums (a group of school districts) were funded $10,000 each to develop an innovative vocational program addressing itself to four areas: career education, individualization, equal educational opportunity and evaluation. Each consortium developed a plan and is now (1973) in the process of implementation.[6]

The O.S.P.I. also administers federal funds. The Title III E.S.E.A. program (stemming from the Elementary and Secondary Education Act of 1965) funds innovative research and development projects. Through this project, the O.S.P.I. has channelled nearly $50,000 into career education programs in the last five years.[7] Other than these two programs, the O.S.P.I. has no specific or categorical funding for career education.

The vast majority of funds in Illinois for CG/CE are distributed by the Division of Vocational and Technical Education (D.V.T.E.). This office has expended over one million dollars in recent years for CG/CE, primarily for research and development.[8] Besides grants, the D.V.T.E. will reimburse school districts (30 cents per child for a certain number of credit hours) which offer CG/CE programs that meet their criteria. The D.V.T.E. has specific guidelines spelled out for school districts to follow in order to qualify for said reimbursement.[9]

Illinois is the only state in the union in which Vocational Education is a separate agency from the State Education Office. This separation creates some problems in duplication of services and grants, and generally foments competition and animosity between the two offices.[10] Since 1971, all federal funds earmarked for career education in Illinois have been disseminated through D.V.T.E. instead of the O.S.P.I. Resultantly, the amount of money spent on CG/CE by the O.S.P.I. is somewhat insignificant when compared with the money spent by D.V.T.E.[11]

The above discussion indicates that both federal and state funds are available for CG/CE programs. However, at this point in time, the majority of funds are grants for research and development. Very little implementation is taking place. Peoria School District #51 is the only school district in the nation to receive a direct grant from the federal government.[12] Peoria spent two years in research and development and has implemented a comprehensive kindergarten through grade twelve CG/CE program.[13] However, for the average Illinois public school system, special funds for career education or career guidance programs are not available. The schools which currently

have CG/CE programs have, for the most part, taken funds from their general operating budgets.[14]

EXTENT OF CG/CE IN ILLINOIS PUBLIC SCHOOLS

The term "extent" of CG/CE indicates three different types of information. First, we are interested in discerning the numbers and percentages of Illinois grade schools, junior highs and high schools offering CG/CE programs, or the numbers and percentages of student questionnaire respondents who reported CG/CE programs. Secondly, the types of CG/CE programs available are important; and thirdly, the quality of the programs will be explored.

GRADE SCHOOLS (GRADES 1-6)

Mr. Dan Brauer estimated that 20% or about 200 grade schools in the state now have CG/CE programs.[15] Gary Hoffman estimated that only approximately 5-10% of Illinois grade schools offer CG/CE programs.[16] Both officials agreed that most of the existing programs have been implemented in the last 3-5 years.

Dr. Marla Peterson, somewhat of an expert in the area of CG/CE in grade schools, estimated that only 2-5% of the Illinois grade schools she has come in contact with had even a semblance of a CG/CE program.[17]

Of the 500 student questionnaires distributed, 217 were returned to the author. Question #8 on the questionnaire inquired of the student if his grade school had a career guidance program. All 217 respondents answered question #8. Two hundred and eleven

students (97.2%) indicated that their grade schools did not offer a career guidance program, while only six students (2.8%) responded affirmatively. The questionnaire provided no way of discerning the number of schools with or without CG/CE. The students were asked to identify their grade schools only if it had a CG/CE program. The author believes this 2.8% figure to be remarkably high when one considers that the majority of student respondents have been out of grade school for at least seven to ten years. If in truth, the majority of CG/CE programs have been initiated in schools in the last three to five years, then the present extent of CG/CE must be much greater than indicated by the questionnaires.

JUNIOR HIGH SCHOOLS (GRADES 7-9)

Mr. Brauer, Mr. Hoffman and Dr. Marla Peterson all agree that approximately 10% to 15% of the junior high schools in Illinois offer CG/CE programs. An interesting discrepancy appeared here, both Mr. Hoffman and Dr. Peterson indicated an increase in the incidence of CG/CE in junior highs, as compared to grade schools, but Mr. Brauer estimated a smaller percentage for junior highs than for grade schools. Once again, all sources believed the majority of programs to have been implemented in the last three to five years.

Question #10 asked the questionnaire subject if his junior high school offered a career guidance program. Of the 217 respondents, 194 (89.4%) answered negatively and 23 (10.6%) responded in the affirmative. These figures show nearly an 8% increase in the incidence of CG/CE in junior highs as compared to grade schools. The percentages

are again aligned with the experts' estimates. Yet, again, it has been many years since a large percentage of the student respondents were in junior high school. All indications are that a much higher proportion of junior high schools should now have CG/CE programs.

HIGH SCHOOLS (GRADES 10-12)

The emphasis in this paper is on CG/CE at the high school level. At this point in time, high schools have the most developed CG/CE and vocational education programs. Occupational education is presently most important at the high school level, since most current high school students have had little or no CG/CE in lower grades. It will take many years for adequate CG/CE programs for grade and junior high schools to be developed and implemented. If contemporary students are to be aided today and in the near future, that aid must be offered at the high school level.

Dan Brauer estimated that about 350 (25%) Illinois high schools offer CG/CE in one form or another. Gary Hoffman was considerably more liberal in his estimate that a full 50% of Illinois high schools have programs. Nationally, career guidance exists in approximately 52% of public high schools.[18]

When the students were asked if their high schools had a career guidance program (question #10), an astounding 159 students (73.3%) out of 217 answered affirmatively. Only 58 respondents (26.7%) answered that their high schools did not offer CG/CE in any form.

Question #4 asked the students to identify their high schools. One hundred and sixty Illinois high schools were represented. Forty six (28.7%) of the high schools were reported to have no guidance

programs whatsoever, while 114 (71.3%) were indicated to offer CG/CE programs of one form or another.

TYPES OF GUIDANCE

A discussion of the extent of CG/CE would be incomplete without consideration as to the types of programs most common. Mr. Brauer and Mr. Hoffman agreed that the most common CG/CE programs in Illinois public schools consist of an available counselor and a small library of career information materials. It is the intent of this section of the paper to discern what types of CG/CE are made available to students, at the three educational levels, and which forms of CG/CE are most common.

GRADE SCHOOLS AND JUNIOR HIGH SCHOOLS

Questionnaire questions #9 and #11 asked the students to mark the different types of CG/CE available in their grade and junior high schools, respectively. The subjects were instructed to indicate all forms that were applicable. Only those students answering affirmatively to questions #8 or #10 were instructed to answer questions #9 or #11, respectively. The following choices were listed:

A. Formal classroom course---was it required or optional?

B. Personal guidance from a counselor or teacher.

C. Career materials made available.

D. Career aptitude or career interest tests.

E. Other.

The choices for questions #9 (grade schools) and #11 (junior high schools) were identical. Table I displays the results of these questions.

TABLE I

TYPES OF CG/CE AVAILABLE AT THE GRADE SCHOOL AND JUNIOR HIGH LEVELS

	Total Respondents	A	Required	Optional	B	C	D	E
Grade Schools	6	1 (16.7%)	0	1	3 (50.0%)	3 (50.0%)	2 (33.3%)	0
Jr. High Schools	23	6 (26.1%)	3	1	17 (73.9%)	16 (69.6%)	8 (34.8%)	1 (4.4%)

The numbers of student responses involved in Table I were so small that no valid conclusions could be drawn. However, the figures did indicate that personal guidance from a teacher or counselor and the availability of career information materials were indeed the most common, at least in the schools involved in this particular case.

HIGH SCHOOLS

Hoffman and Brauer shared the opinion that the average Illinois high school CG/CE program consists of three characteristics: 1) personal guidance from a teacher and/or counselor, 2) career materials made available, and 3) career aptitude and/or career interest tests.

Through the questionnaire the author set up a dual testing system to discern the types of CG/CE available. Question #13 asked the students to indicate all forms of CG/CE available in their high schools. Only those students responding affirmatively to question #12

(Did your school offer a CG/CE program?) were instructed to complete question #13. The following choices were listed for the students:

A. Formal classroom course---was it 1) required, or 2) optional?

B. Personal guidance from a counselor or teacher.

C. Career materials made available.

D. Career aptitude or career interest tests.

E. Diversified occupations program (students work part of school day in an occupation).

F. High school job placement service.

G. Other.

TABLE II

TYPES OF CG/CE AVAILABLE IN HIGH SCHOOLS
(159 total student respondents)

A	Required	Optional	B	C	D	E	F	G
32 (20.1%)	6	13	135 (84.9%)	140 (88.1%)	105 (66.0%)	112 (70.0%)	48 (30.2%)	8 (5.0%)

Table II indicates that 20.1% of the students responded that their high school offered CG/CE in the form of a formal classroom course, alone, or in conjunction with other forms. As suggested by the state school officials, personal guidance from a counselor or teacher (84.9%) and available career materials (88.1%) were most often cited. Diversified occupation programs and high school job placement services were also frequently indicated. Dan Brauer had estimated that only 1% to 2% of Illinois high schools offered job placement services. The findings of Table II seem to dispute his estimate.

Interestingly, six of the eight students who marked G, other, commented that their high schools had a "career day" and/or a "college day." The author suspects that if the questionnaire had offered these options, that "career day" and "college day" would have been frequently checked.

QUALITY OF GUIDANCE

The next area for consideration was the quality of the career aid provided by the schools. It was decided to test the quality of CG/CE received by the students by asking a series of direct questions. Questions #18 through #27 asked the students these questions:

18. A. Have you ever heard of the Occupational Outlook Handbook?

    B. Was it made available to you in high school?

19. Were you informed of the nature of the work in various occupations?

20. Were you informed of the required qualifications for various jobs?

21. Were you informed of the job prospects in various occupations?

22. Were you informed of saturated occupations? (Where a surplus of labor already existed)

23. Were you ever given career aptitude tests to discern which occupations you were best suited for?

24. Were you ever given career interest tests to discern which occupations you were most interested in?

25. Were you informed of the geographic areas with the best employment prospects?

26. Were you taught job hunting techniques? (How to find a job, how to act at an interview, etc.)

27. Do you feel your high school counselors were cometent in the area of career guidance?

TABLE III

RESPONSES TO QUESTIONS 18-27

Question #	Total Responses	Yes	% Yes	No	% No
#18 A	165	43	26.1%	122	73.9%
B	136	31	22.8%	105	77.2%
#19	164	90	54.9%	74	45.1%
#20	163	90	55.2%	73	44.8%
#21	161	84	52.2%	77	47.8%
#22	165	84	50.9%	81	49.1%
#23	164	81	49.4%	83	50.6%
#24	164	75	45.7%	89	54.3%
#25	160	14	8.8%	146	91.3%
#26	159	35	22.0%	124	78.0%
#27	165	58	35.2%	107	64.9%

The number of students responding to these questions varied because each student did not answer every question. Some rather interesting contradictions appeared when Table III was compared with Table II. In Table II, 140 of 159 students (88.1%) indicated that career materials had been made available to them in their high schools. Yet in Table III, only 43 of 165 students (26.1%) said that they had ever heard of the Occupational Outlook Handbook, the most common of all career materials. Only 31 students of the 136 answering #18B indicated that the Occupational Outlook Handbook had been made available to them in their high schools. It is possible that the

Occupational Outlook Handbook may have been available in some schools and the students did not know it. Some students may even have used it but did not recognize the name. It is interesting, however, that 73.9% of the 165 students who answered #18A have never heard of the Occupational Outlook Handbook, even though they are now in college.

One hundred and thirty-five students (84.9%) indicated in Table II that their high schools offered guidance from a teacher or counselor; yet in Table III, only 58 students (35.2%) of the 165 responding thought their high school counselors were competent in the area of career guidance.

It becomes evident from the results of Table III that the somewhat extensive existence of CG/CE programs does not insure that the programs are of high quality. One hundred and fifty-nine students (73.3%) said that their high schools offered CG/CE in some form. Yet, only 54.9% of the students answering question # 19 indicated that they had been informed of the nature of the work in various occupations. This information is the crux of any CG/CE program, yet only a little over one-half of the students were given this basic information. Only 55.2% and 52.2% of the respondents were apprised of the required qualifications or employment prospects for various occupations, respectively. Approximately one-half of the respondents (50.9%) were informed of saturated occupations. It is little wonder that the current teacher surplus exists if these students are indicative of the state population. Less than one-half of the students, 49.4% and 45.7% were given career aptitude or career interest tests, respectively. A mere 8.8% of the students responding were informed of the employment prospects

for various geographical areas and only 22% were taught job hunting techniques.

The author further wished to obtain an overview of the quality of CG/CE offered the students. Questions #18B, #19, #20, #21, #22, #23, #24, #25, #26, #27, #28A, #29 and #30 were used as quality indicators. One point was given for each "yes" or pro CG/CE answer. These questions are listed in the questionnaire in Appendix A.

Four categories of CG/CE, by quality, were designed; good guidance (9-12 pro CG/CE points), fair guidance (5-8 points), poor guidance (1-4 points) and no guidance (no points). Twenty-six students (12.0%) were appraised to have received good CG/CE in high school. Fifty-four students (24.9%) received fair CG/CE; 79 respondents (36.4%) received poor CG/CE; and 58 students (26.7%) had no CG/CE whatsoever in their high schools.

These figures clearly indicate that only 36.9% (good guidance and fair guidance) of all the student respondents received at least adequate CG/CE in their high schools. Over 63% of the students received poor or no career aid at all while in high school.

Mr. Calvin Campbell, currently employed as an academic advisor by Eastern Illinois University, also explored the extent of career guidance services in Illinois high schools.[19] He examined the extent of guidance services available as perceived by both a sampling of Eastern Illinois University students and the guidance counselors in 84 high schools. His findings are reported, in part, in Table IV on page 43.

Campbell's findings indicate strong discrepancies between the guidance services reported by the guidance directors and the services perceived by the students. The guidance directors of 48 schools reported that they had vocational tests available. Yet, only 19 students of 115 indicated they had availed themselves of this service.[20] One hundred percent of the schools reported counseling or orientation services, yet only 52 students (45.2%) reported this service. Generally, the guidance directors reported a rather extensive CG/CE program, however, the students markedly disagreed. Campbell tested the discrepancies with the Chi Square statistical test. He found the differences in the availability of career guidance services, as perceived by guidance directors and students, to be significant at the 0.01 level.[21]

Campbell concluded that the career guidance services were made available, at least in theory, in Illinois public high schools, but the students were not aware of their existence and had not availed themselves of them.

A few conclusions can be drawn at this time as to the extent of CG/CE (both quantity and quality) available in Illinois high schools. It appears as though CG/CE services are available, at least in name, in most high schools. This conclusion is evidenced by the student responses to questionnaire question #13, and the responses of the guidance directors in Mr. Campbell's study. However, the services available are of dubious quality, as exemplified by Table III.

TABLE IV

GUIDANCE SERVICES AVAILABLE AS REPORTED BY THE HIGH SCHOOLS' GUIDANCE DIRECTORS AND THE STUDENTS' CONCEPTION OF THE GUIDANCE SERVICES AVAILABLE FROM THEIR HIGH SCHOOLS

Responses	College Catalogs	A File of Occupational Books and Pamphlets	The Use of Occupational Charts, Films, and Exhibits	A Class in Occupations	Occupational Units With School Courses	A Career Day	A College Day	Visits With Business And Industry	Referral to Community Persons	Specific Vocational Testing	Counseling or Orientation
Guidance Directors (Totals=84)	84	82	75	19	47	26	36	40	61	48	84
Percent	(100.0%)	(97.6%)	(89.3%)	(22.6%)	(56.0%)	(31.0%)	(42.9%)	(47.6%)	(72.6%)	(57.1%)	(100.0%)
Students (Total=115)	103	81	39	20	28	37	44	19	30	19	52
Percent	(89.6%)	(70.4%)	(33.9%)	(17.4%)	(24.3%)	(32.2%)	(38.3%)	(16.5%)	(26.1%)	(16.5%)	(45.2%)

Source: Calvin Campbell, "The Students' Conception of the Informational Services Function at the High School Level," unpublished thesis for a Specialist in Education Degree, Eastern Illinois University, 1972, pp. 32 and 35.

DIFFERENTIALS IN CAREER GUIDANCE AND CAREER EDUCATION

In section five of Chapter I, three possible differentials in the CG/CE offered students were considered. The differentials mentioned were: 1) sex differences, 2) college bound/non-college bound student differences, and 3) school size differences. It is the intent of this section of the study to explore the existence of these three differentials in Illinois high schools.

SEX DIFFERENTIALS

Dan Brauer, Gary Hoffman and Dr. Marla Peterson all agreed that the sex of the student does influence the quality and quantity of CG/CE he receives in high school. Career stereotyping according to sex is very common. Female students are nearly automatically steered into home-economics or secretarial fields. Male students, on the other hand, usually receive the best CG/CE the school has to offer. Possible college bound/non-college bound student differentials will be discussed later.

Questionnaire questions #15 and #16 directly asked the students about possible sex differentials in their schools. Question #15 asked the females if they thought they received more, less, or the same career guidance as the male students. Conversely, question #16 asked the males if they thought they had received more, less, or the same career guidance as the females. The author expected a negative relationship between the answers of the males and females. Logically, the more males indicating they received more guidance than the females, then the more females should indicate they received less guidance than the males.

A total of 96 females answered question #15. Seventy-nine co-eds (82.3%) believed they received the same career guidance offered the males. Thirteen females (13.5%) indicated they received less guidance than the males and 4 girls (4.12%) said they received more CG than their male counterparts. Of the 47 males responding to question #16, 37 (78.7%) indicated that both sexes were offered the same CG in their high schools, 4 students (8.5%) said that the males received less guidance than the females, and 6 men (12.8%) believed the males were offered more career aid than the females. These figures imply that the vast majority of students feel that career aid was equitably offered all students, regardless of sex. The predicted inverse relationship does exist, 13.5% of the females claimed they received less guidance, and 12.8% of the males admitted that they had more guidance than the females. Slightly over 4% of the females said they received more CG than the males and 8.5% of the males agreed.

In order to further test for a sex differential the author compared the responses of males against females on questions #18A and #18B, #19, #20, #21, #22, #23, #24, #25, #26, and #27. These questions were designed to indicate the career aid actually received by the students.

The Chi Square statistical test was employed to determine the significance of the sex differentials. H_1: no relationship exists between the sex of the respondents and the CG/CE received. The 5% significance level was used. Chi Square values were computed for each question. Each subtable had one degree of freedom, hence the continuity correction was required. If the calculated X^2 value

exceeded 3.84 (5% level), H_1 was rejected. Table V shows the results of questions 18-27. (These questions may be found in Appendix A.)

A significant relationship between the sex of the student and the career aid received appeared in only three of the eleven questions in Table V. The nature of these relationships can only be determined by examining the data. Question #18A asked the student if he had ever heard of the Occupational Outlook Handbook; 37.3% of the males, compared with 19.8% of the females, answered affirmatively. These figures indicate that the males in the survey may have received more career aid in this area than the females. However, no significant relationship was found between sex and the availability of the Occupational Outlook Handbook in high schools (question #18B). It appears, therefore, that even though significantly more males than females are aware of the Occupational Outlook Handbook, the differential is not due to inequitable career aid at the high school level.

Significant relationships also appeared in questions #23 and #24. Questions #23 and #24 asked the students if they were given career aptitude or career interest tests in high school, respectively. The raw data for these questions indicate that male students were offered less career aid than the females. Nearly 56% of the female respondents to question #23 said they were given career aptitude tests while only 38.3% of the males had these tests. Only 36.9% of the males were given career interest tests, compared with 53.9% of the females.

A general conclusion can be drawn from Table V and the student responses to questions #15 and #16. No conclusive sex differential in the career aid offered students exists in Illinois public high schools, as indicated by the students in the sampling.

TABLE V

POSSIBLE SEX DIFFERENTIALS IN THE EXTENT OF CAREER AID RECEIVED BY THE STUDENTS

$\alpha = 0.05$
Region of Rejection for H_1: $X^2 \geq 3.84$

Question Number		Sex	Yes	(Expected) (Yes)	No	(Expected) (No)	Totals	X^2	H_1 Accepted or Rejected*
18	A	M	22	(15.4)	37	(43.6)	59		
		F	21	(27.6)	85	(78.4)	106		
			43		122		165	5.10	Rejected*
	B	M	16	(11.8)	36	(40.2)	52		
		F	15	(19.2)	69	(64.8)	84		
			31		105		136	2.42	Accepted
19		M	31	(32.9)	29	(27.1)	60		
		F	59	(57.1)	45	(46.9)	104		
			90		74		164	0.37	Accepted
20		M	34	(32.6)	25	(26.4)	59		
		F	56	(57.4)	48	(46.6)	104		
			90		73		163	0.09	Accepted
21		M	34	(31.8)	27	(29.2)	61		
		F	50	(52.2)	50	(47.8)	100		
			84		77		161	0.29	Accepted
22		M	27	(31.1)	34	(30.0)	61		
		F	57	(53.0)	47	(51.1)	104		
			84		81		165	1.31	Accepted
23		M	23	(29.6)	37	(30.4)	60		
		F	58	(51.4)	46	(52.6)	104		
			81		83		164	3.91	Rejected*
24		M	19	(27.4)	41	(32.6)	60		
		F	56	(47.6)	48	(56.4)	104		
			75		89		164	5.61	Rejected*
25		M	7	(4.8)	48	(50.2)	55		
		F	7	(9.2)	98	(95.8)	105		
			14		146		160	1.00	Accepted
26		M	15	(12.3)	41	(43.7)	56		
		F	20	(22.7)	83	(80.3)	103		
			35		124		159	0.77	Accepted
27		M	21	(20.7)	38	(38.3)	59		
		F	37	(37.3)	69	(68.7)	106		
			58		102		165	0.009	Accepted

COLLEGE BOUND/NON-COLLEGE BOUND STUDENT DIFFERENTIAL

Nationally, college bound students receive far more career aid than non-college bound students. It is the design of this section of the paper to explore this phenomenon in Illinois public high schools.

Both O.S.P.I. officials agreed that there is no college bound/non-college bound differential in the average Illinois high school. Mr. Hoffman admitted that there might be more career information (in the form of college catalogs) available for college bound students, but every other aspect of CG/CE should be the same.

Questionnaire question #17 asked the respondents if the college bound students received more, less or the same guidance as the non-college bound students. A full 50% of the 150 students responding said the college bound students received more guidance than the non-college bound students. A little more than 41% indicated that all students received the same career aid and 8.7% claimed that the non-college bound students received more guidance than their college bound counterparts.

The sampling included only college students, therefore, it is impossible to compare the answers of college bound students with actual non-college bound students. However, many students commented that their non-college bound friends were given practically no career aid whatsoever. One student commented that his high school guidance counselor told him in private that, "Kids that don't go to college never amount to anything anyway, I don't have time to waste on them."

It therefore appears evident from the responses to question #17 and student comments, that in many cases college bound students received considerably more career aid than their non-college bound counterparts.

SCHOOL SIZE DIFFERENTIALS

It has been posited that students from small schools are at a disadvantage in the area of CG/CE when compared with students from larger high schools. Mr. Gary Hoffman, O.S.P.I. official, suggested that large suburban schools are generally more innovative and more financially capable of offering a better career aid program than small rural schools. Mr. Dan Brauer, on the other hand, posited that no school size differential exists in Illinois high schools in the area of CG/CE. Lastly, Dr. Marla Peterson claimed that the best CG/CE programs she has encountered have been in smaller schools with student bodies numbering about 1,000.

In order to test for this differential, the author divided the student questionnaires into four categories, by high school size. Ninety-one students (41.9%) came from high schools with student populations under 500. Fifty-five students (25.4%) were from high schools of 500-1500 students, 51 of the respondents (23.5%) came from high schools 1500-3000 students and 20 students (9.2%) reported high school enrollments of over 3,000 students.

Question #12 asked the student if his high school had a career guidance program. When the author compared the student responses by school size, he found a Chi Square value of 10.56. With three degrees of freedom and alpha = 0.05, the region of rejection of H_1 (that no relationship exists between school size and the CG/CE received) was only 7.81. Therefore, H_1 was rejected and a significant relationship was established that the existence of a CG/CE program was related to the size of the high school.

The raw data tend to support Mr. Hoffman's theory that larger schools are more likely to offer career aid programs than smaller schools. Sixty-two and six-tenths percent of the students from schools with enrollments of under five hundred reported career aid programs. Seventy-six and four-tenths percent of the respondents from schools of 500-1500 students reported CG/CE programs, while 82.4% of the students from schools of 1500-3000 students had CG/CE programs. Ninety percent of the respondents from high schools with a student population of over 3,000 indicated that their schools offered CG/CE in some form.

Regression Analysis

The next step was to test for a relationship between the quality of CG/CE offered and the size of the high school. Step-wise multiple linear regression analysis, employing the BIOMED BMD02R computer program, was used.

Questionnaire questions #18B, #19, #20, #21, #22, #23, #24, #25, #26, #27, #29, and #30 were used as quality indicators. One point was allotted for each affirmative CG/CE answer. No points were given for negative responses. The dependent variable, the quality of CG/CE received, was comprised of the total number of points allotted per student. A maximum of 12 points could be allotted for excellent CG/CE or a minimum of zero points for no CG/CE.

The independent variables used were high school size (under 500, 500-1500, 1500-3000 and over 3000) and the number of years elapsed since the student graduated from high school. A positive relationship was postulated between high school size and the quality of CG/CE

dependent variable. In other words, as the size of the high school increased, the number of affirmative CG/CE answers should have increased. The second independent variable, the number of years elapsed since high school graduation, will be considered in a later section of the paper.

Only students who answered affirmatively to question #12, thus indicating that their high schools did offer CG/CE in some form, were included in the regression. If the other students were included, an abnormal number of zero responses would have been involved. Also, the intent of the regression was to test the quality of existing programs, obviously it would have been impossible to determine the quality of nonexistent programs. Therefore, a total of only 157 students was involved in the regression.

The R^2 is a measure of the percentage of explained variance to the total variance. The total R^2 in this study was 0.0108. This means that the independent variables explained a little more than 1% of the total variance from the regression line. The school size R^2 was 0.0002, thus it explained about 0.02% of the total variance. The small R^2 indicated that school size had almost no relationship at all to the quality of the CG/CE program offered.

The question now arises; was the R^2 for school size significantly different from zero? If the R^2 was not significantly different from zero, then the variable was absolutely unimportant in the explanation of the variance. There are two easily administered tests to test the significance of the R^2. The first test was the F test. The computer print out gave an F ratio for each independent variable.

By matching this ratio with the degrees of freedom (also given) on an F table, significance levels were easily derived. The second test was the t test. By dividing the coefficient of each variable by the standard error, a t value could be derived. It was then a simple matter to equate the t value with the degrees of freedom on a t table to find significance levels for the variables. The school size variable proved insignificant at both the 1% and 5% levels, using both the F and t tests.

In summary, a significant relationship does appear to exist between the existence of a CG/CE program and school size. However, the quality of the program does not appear to be significantly related to the size of the high school.

Three additional areas were examined for relationships with school size: 1) sex differentials as indicated by questions #15 and #16, 2) college bound/non-college bound student differentials as indicated by question #17, and 3) student opinions of the competency of their high school counselors in the area of CG/CE, as indicated by question #27. The Chi Square test was once again used to test for relationships.

No significant relationships were found between high school size and sex differentials or between high school size and the competency of counselors in the area of CG/CE. However, a significant relationship did appear between high school size and college bound/non-college bound student differences in the CG/CE received. Seventy-five percent of the respondents from high schools of 500-1500 students

reported that college bound students received more career aid than non-college bound pupils. Forty-seven and two-tenths percent, 37.5% and 40% of the students from schools with enrollments of under 500, 1500-3000 and over 3000, respectively, reported that college oriented students were offered more CG/CE than their non-college oriented counterparts. Forty-five percent of the students from schools of under 500 enrollment, 52.5% of the respondents from school of 1500-3000, 46.7% of those from schools over 3000, but only 20.0% of the respondents from schools with 500-1500 students thought the same career aid was offered equitably to all students. It appears, therefore, that the respondents from the under 500, the 1500-3000 and the over 3000 students school sizes reported very similar opinions about the CG/CE offered. The unusual figures were concentrated in the 500-1500 enrollment grouping.

It may be possible that in the small schools (under 500 students) a single counselor or very small staff can equitably mete out career aid to each and every student. The larger schools (1500-3000 and over 3000) may have particularly comprehensive career education and career guidance programs including a strong vocational education curriculum especially designed for non-college oriented students. Thus, there may be little difference between the CG/CE offered college bound and non-college bound students in these two school groupings. A high school with a student population of 500-1500, on the other hand, is neither large nor small. It may be too small to allow one counselor or a small staff to effectively aid each and every student. The result may be a disproportionate amount of career aid for the college bound students, for whom most high schools are geared. Conversely, a high school of that size may not have

nearly the taxing district, hence the funds available, that a larger school may enjoy. Therefore, the intermediate school possibly cannot afford comprehensive counseling, career education and vocational education programs which would more equitably disseminate career aid. The preceeding explanations for the seeming aberrations of the 500-1500 school size group are strictly speculation. However, an interesting follow-up study could be done to explore the finances, counseling staffs and CG/CE programs offered by various sizes of high schools.

The above discussion of possible differentials in the CG/CE offered students dealt only with the effects of differentials on the extent and quality of CG/CE. The effects of differentials on the effectiveness of career aid will be considered in Chapter III.

FOOTNOTES

CHAPTER II

[1]Interview with Mr. Gary Hoffman, former director of O.S.P.I., Division of Career Education, Springfield, Illinois, July 9, 1973.

[2]Ibid.

[3]Ibid.

[4]Ibid.

[5]Interview in letter form with Mr. Dan Brauer, Educational Specialist II in Pupil Personnel Section, Office of Superintendent of Public Instruction, Springfield, Illinois. Letter sent out on July 16, 1973.

[6]Interview with Mr. Gary Hoffman.

[7]Ibid.

[8]Ibid.

[9]Ibid.

[10]Ibid.

[11]Ibid.

[12]Interview with Dr. Marla Peterson, Director of the Enrichment of Teacher and Counselor Competencies in Career Education Project (K-6) Eastern Illinois University, August 1, 1973.

[13]Ibid.

[14]Ibid.

[15]Interview with Mr. Dan Brauer.

[16]Interview with Mr. Gary Hoffman.

[17]Interview with Dr. Marla Peterson.

[18]Lawrence Davenport, "Career Guidance: A Call for Change," Manpower, IV (November, 1972), 11.

[19]Calvin Campbell, "The Students' Conception of the Informational Services Function at the High School Level," Unpublished thesis, Eastern Illinois University, 1972, p. 32 and 35.

[20]Ibid., p. 34.

[21]Ibid., p. 36.

CHAPTER III

THE EFFECTIVENESS, COMPETENCY OF COUNSELORS AND POSSIBLE IMPROVEMENT OF CAREER GUIDANCE AND CAREER EDUCATION PROGRAMS IN ILLINOIS PUBLIC HIGH SCHOOLS

EFFECTIVENESS

A career guidance and career education program is deemed effective if it actually plays a part in the student's choice of an occupation or college major. No matter how extensive a CG/CE program may be, if it fails to prepare the student for ultimate employment, it is ineffective.

The author asked both state O.S.P.I. officials if they thought most existing CG/CE programs were adequate in extent and effectiveness to prepare young people for entry into the labor market. Mr. Brauer responded that the average CG/CE program was not adequate. He stated that most high schools are presently set up to prepare students for liberal education and not job entry. He suggested that existing CG/CE programs were probably ineffective due to the attitudes of counselors, administrators and teachers. Most high schools are geared to prepare students for college; occupational preparation is far down the list of priorities. Hence, counselors, administrators and teachers may perform their CG/CE duties perfunctorily, with little enthusiasm.[1]

Gary Hoffman was of the same mind. He maintained that the concept of CG/CE is so new that it has not yet been accepted by many

people in the educational environment. He suggested that teachers, counselors and administrators may feel threatened by the new concept and are resultantly hostile to it. Consequently, CG/CE programs are often poorly administered and are thus ineffective.[2]

A section of the student questionnaire was specifically designed to explore the effectiveness of the reported career aid programs. Question #28 asked the student to indicate all the sources which influenced him in his selection of a college major. The sources listed were: A) High school career guidance, B) Parental influence, C) College career guidance, D) Influence of friends, E) Stumbled into it, and F) Other. Only 31 students (14.3%) indicated that high school career guidance had influenced their choices of majors, either by itself or in conjunction with other factors. Of the 159 respondents who had CG/CE programs in their high schools, those 31 students who marked #28A made up only 19.5% of the total. It is interesting to examine the other sources of influence. Fifty-five students (25.4%) reported parental influence as a source of influence, 22 students (10.1%) were helped by college career guidance, 36 respondents (16.6%) were influenced by friends, 64 students (29.5%) admitted they just stumbled into their majors, and a plurality of 104 respondents (47.9%) were influenced, at least in part, by other sources. Other sources ranged from a deaf mute neighbor (hence a speech pathology major) to a "vision from God" resulting in a missionary major. The most common source written in the blank for F) Other, was "personal interest." Students often remarked that they had chosen their occupations (and thus their college majors) while in grade school.

Question #29 asked if the high school career guidance program played an important part in the student's choice of a college major. A vast majority of 192 respondents (89.7%) reported that their high school CG/CE programs had not played an important role in their choice of majors. Only 22 students (10.3%) indicated that their high school CG/CE programs had been an important influence.

Question #31 asked the student if he had changed majors since entering college. Question #32 followed up by asking if the respondent thought a better high school career guidance program would have made a change of major unnecessary. Of the 75 students who reported changing majors in question #31, 53 (71%) said that they thought a better high school CG/CE program would have made the change of major unnecessary. Twenty-two respondents (29%) indicated that a better program could not have averted their change of major.

Question #35 asked, "If you had known what you know now about employment prospects, working conditions, etc., for your major, would you have chosen the same major?" One hundred and seventy-four (84.5%) of the 206 respondents indicated that they would still have chosen the same major. Thirty-two students (15.5%) would have chosen different majors.

The student was asked in question #36 if he believed better career guidance in high school would have influenced him to choose a different major than he chose upon entering college. Eighty-two of the respondents (39.4%) believed that a better high school CG/CE program might have influenced them to choose a different major. The remaining 126 students (60.6%) did not believe improved CG/CE would have made a difference.

In order to determine if the existing CG/CE programs were effective, the questionnaires were divided into four categories, by the quality of career aid received. One point was allotted for each affirmative CG/CE answer to questions #18B, #19, #20, #21, #22, #23, #24, #25, #26, #27, #28A and #29. No points were allotted for negative CG/CE answers. These questions were used to indicate the quality of the career aid received by each student. Good guidance = 9-12 points, fair guidance = 5-8 points, poor guidance = 1-4 points and no guidance = 0 points. All 217 questionnaires were tallied.

The Chi Square statistical test was once again employed to test for relationships. H_1 in each subtable hypothesized that no relationship existed between the quality of guidance and the response to the question. H_2 hypothesized that a relationship did exist between the quality of guidance and the question considered. Each subtable had 3 degrees of freedom and the 5% significance level was used. If the calculated X^2 was greater than 7.81, H_1 was rejected. Questions #28A, #29, #31, #32, #35 and #36 were considered; they can be found in Appendix A at the back of the paper. The results of this section of the study are displayed in Table VI.

A very strong relationship appears to exist between the student answers to question #28A (did high school career guidance play <u>any</u> part in the student's choice of college major) and the quality of the CG/CE received by the student. The nature of the relationship can be appreciated by examining the raw data. Sixteen students (61.5%) in the good guidance group marked #28A, indicating that their high school CG/CE programs had influenced their choice of major. Eleven students

(20.4%) in the fair guidance group, three respondents (3.8%) in the poor guidance group and no students from the no guidance category affirmatively indicated question #28A.

Similarly, a very significant relationship was uncovered in question #29. A full 50% of the students from the good guidance group said that their high school CG/CE programs played an <u>important</u> part in their choice of major. Only 20.4% of the respondents from the fair guidance category, 3.8% of the students in the poor guidance group and zero students in the no guidance cluster thought their high school CG/CE programs played an important part.

These figures tend to indicate a very strong, positive relationship between the quality of CG/CE and the influence of career guidance programs. The better the program, the more likely it is to influence the student in his choice of college major. Since this influence is defined as effectiveness, these responses tend to indicate that the better quality career aid programs are more effective than the lesser quality programs.

No significant correlations appeared in the responses to questions #31 (Have you changed majors since you entered college?), #32 (Do you think a better high school career guidance program would have made a change of major unnecessary?) or #35 (If you had known what you know now about employment prospects, working conditions, etc., for your major would you have chosen the same major?). From the comments to question #31 and the students' explanation as to why they changed majors after entering college, the author learned that the most common reason a student changed majors was ignorance

TABLE VI

THE EFFECTIVENESS OF CG/CE AS INFLUENCED BY THE QUALITY OF CG/CE RECEIVED

$\alpha = 0.05$
Region of Rejection for H_1: $X^2 \geq 7.8$

Question Number	Quality of CG/CE					Totals	X^2	H_1 Accepted or Rejected*
		28A Marked	(Expected) (Marked)	28A Unmarked	(Expected) (Marked)			
28A	Good	16	(3.60)	10	(22.41)	26		
	Fair	11	(7.47)	43	(46.55)	54		
	Poor	3	(10.92)	76	(68.08)	79		
	No	0	(8.02)	58	(49.98)	58		
		30		187		217	67.49	Rejected*
		Yes	(Expected) (Yes)	No	(Expected) (No)			
29	Good	13	(2.64)	13	(23.36)	26		
	Fair	8	(5.48)	46	(48.53)	54		
	Poor	1	(8.01)	78	(70.99)	79		
	No	0	(5.88)	58	(52.12)	58		
		22		195		217	59.92	Rejected*
31	Good	8	(9.39)	18	(16.61)	26		
	Fair	20	(19.86)	35	(35.14)	55		
	Poor	28	(27.81)	49	(49.19)	77		
	No	22	(20.94)	36	(37.06)	58		
		78		138		216	0.383	Accepted
32	Good	2	(3.18)	4	(2.82)	6		
	Fair	6	(6.88)	7	(6.12)	13		
	Poor	10	(9.53)	8	(8.47)	18		
	No	9	(7.41)	5	(6.59	14		
		27		24		51	1.946	Accepted
35	Good	24	(22.82)	2	(3.18)	26		
	Fair	39	(37.74)	4	(5.26)	43		
	Poor	57	(60.56)	12	(8.44)	69		
	No	45	(43.88)	5	(6.12)	50		
		165		23		188	2.788	Accepted
36	Good	3	(8.16)	22	(16.85)	25		
	Fair	7	(13.70)	35	(28.30)	42		
	Poor	33	(23.16)	38	(47.84)	71		
	No	18	(15.98)	31	(33.02)	49		
		61		126		187	16.284	Rejected*

of the nature of the course work for his original major. However, the X^2 test of the responses to question #31 indicated that no relationship exists between the quality of guidance received by the student and his likelihood to have changed majors.

A significant relationship was found to exist between the quality of guidance received by the student and his response to question #36 (Do you believe better career guidance in high school would have influenced you to choose a different major than you chose when you entered college?). The nature of this relationship was more difficult to discern, but appeared to be negative. As the quality of guidance improved, the student was less likely to believe that better guidance would have influenced him to choose a different major. The direction of this relationship was not as distinct as the others, but did appear to be negative.

Employment Prospects

An essential duty of a CG/CE program is to apprise the student of the future employment prospects for his chosen field. Employment is the ultimate goal of any training program, whether it be of an educational or vocational nature, hence, a correct apprisal of future employment prospects is of paramount importance to the student. This section will investigate the employment prospects of the college majors chosen by the students re the quality of the career aid they received at the high school level.

Each student was asked to specify his current college major at the beginning of the questionnaire. A total of 48 different majors

were reported. Some students did not specify their majors, or designated majors too general to be categorized, hence only 198 questionnnaires could be used for the following investigation.

Using employment projections from the Occupational Outlook Handbook, the Occupational Outlook for College Graduates, the Manpower Report of the President and the Eastern Illinois University Placement Office Annual Report, the author grouped the 48 majors into four categories. The categories established were: A) Excellent, B) Above average, C) Average and D) Below average/poor future employment prospects. It should be noted at this point that neither these categories nor the placement of an individual major in a specific category are infallible. The author established the categories and placed each major by employing information form the four above-mentioned sources. No mathematically empirical formula was used in the placing of the majors, however, the author feels confident that the majors are properly categorized, to the best of his abilities and resources. The categorized majors can be found in Appendix C at the back of this paper.

The first test was made to investigate a possible relationship between the employment prospects of the college majors chosen by the students and the quality of the career aid received by the students in high school. The same career aid quality categories and criteria were used that were explained in the preceeding section of this chapter. Table VII displays the results of the investigation. The X^2 test was again employed. With 9 degrees of freedom, the region of rejection of H_1 (that no relationship exists): $X^2 \geq 16.92$ at the 0.05 significant level.

TABLE VII

CAREER AID QUALITY AND EMPLOYMENT PROSPECTS OF COLLEGE MAJORS

$\alpha = 0.05$
Region of Rejection for H_1: $X^2 \geq 16.92$

Quality of CG/CE	Excellent	(Expected Excellent)	Above Average	(Expected Above Average)	Average	(Expected Average)	Below Average/ Poor	(Expected Below Average/Poor	Total
Good	5	(3.94)	4	(3.81)	6	(9.46)	11	(8.80)	26
Fair	9	(7.27)	5	(7.03)	24	(17.46)	10	(16.24)	48
Poor	11	(10.91)	14	(10.55)	20	(26.18)	27	(24.36)	72
No	5	(7.88)	6	(7.61)	22	(18.90)	19	(17.60)	52
	30		29		72		67		198

Calculated $X^2 = 12.859$.

H_1 accepted.

The results of Table VII show that no significant relationship exists between the quality of the CG/CE received by the students while still in high school, and the employment prospects of the college majors they chose. Theoretically, the students who received better career aid should have chosen college majors with better employment prospects than those students with poor or no career aid. With this particular sampling of students, the reported CG/CE programs appear to have been ineffective in influencing the respondents to choose majors with better employment prospects than those students with no CG/CE. It is interesting to note that overall, 15.2% of the total respondents are in majors with excellent employment prospects, 14.7% are in majors with above average prospects, 36.4% are in majors with average prospects and 33.8% of the respondents are in majors with below average or poor future employment prospects. It is of little wonder that a great many college graduates are unable to find employment in their chosen fields.

The results of Table VII indicated that students, with or without benefit of CG/CE, do not necessarily choose majors with good future employment prospects. It is possible, however, that students do not necessarily choose occupations according to employment prospects. Perhaps at the time when the major was chosen, the student knew the prospects were poor but considered this fact unimportant. Therefore, it was necessary to discern the students' understanding of their employment prospects, as related to the quality of the CG/CE received in high school.

Question #33 asked the student to indicate how he evaluated his understanding of the employment prospects for his major. His choices were: 1) Good understanding, 2) Fair, and 3) Poor. Question #34 asked what the respondent actually thought the employment prospects for his major were. His choices were: A) Excellent prospects, B) Good, C) Average, D) Below average, E) Poor, and F) Don't know.

The first step was to test for a relationship between the student's personal evaluation of his employment prospects and the quality of the CG/CE he had received in high school. It should be noted at this point that a high school CG/CE program is only one of the many sources from which a college student may have learned to appreciate his employment prospects. The calculated X^2 from the table of career aid quality and the students' understanding of their employment prospects was only 11.219. A X^2 of at least 12.59 was necessary to indicate a significant relationship between the two variables. Hence, the student's personal evaluation of his understanding of the employment prospects for his major appears to be unrelated to the quality of the career aid he received in high school.

The author next compared the students' assessments of the employment prospects for their majors (excellent, good, average, below average, poor or don't know) with the authors table of employment prospects. The sources used by the author in determining the employment prospects for the different majors were not sufficiently accurate to categorize the prospects of some majors as below average or poor. Hence, it was necessary to aggregate those two categories into a single below average/poor grouping. The other categories

could be adequately assessed, therefore, no other aggregation was required.

The prospects assessments of 67 students (38.8% of the respondents) were in agreement with those of the author. A total of 131 students (66.2%) did not correctly assess their employment prospects. Table VIII reports the accuracy of the assessments, as broken down by the quality of the guidance received.

TABLE VIII

ACCURACY OF STUDENTS' ASSESSMENTS OF THEIR EMPLOYMENT PROSPECTS AS BROKEN DOWN BY THE QUALITY OF CAREER AID RECEIVED (Student Responses to Question #34, as Compared with the Author's Evaluations)

Quality of CG/CE	Right	(Expected Right)	Wrong	(Expected Wrong)	Total
Good	9	(8.80)	17	(17.20)	26
Fair	13	(16.24)	35	(31.76)	48
Poor	25	(24.36)	47	(47.64)	72
No	20	(17.60)	32	(34.40)	52
	67		131		198

At the 0.05 significance level, with 3 degrees of freedom, the region of rejection for H_1 (that no relationship exists) was $X^2 \geq 7.81$. The calculated X^2 for Table VIII was only 2.098. Therefore, no significant relationship appeared between the accuracy of the students' appraisals of the employment prospects for their majors and the quality of the career aid received in high school.

Of the 90 students who indicated on question #33 they had a good understanding of the employment prospects for their majors, only 26 (28.9%) were actually correct in the appraisals of the prospects for

their majors. A majority of 64 respondents (71.1%) did not actually know their true prospects, even though they claimed to have a good understanding of their situation. It was not uncommon to find elementary education majors, who claimed to have a good understanding of their employment prospects, assessing those prospects as excellent.

Admittedly, many times the student's assessment was only one category distant from the author's, i.e., the author placed elementary education in "Below average/poor" and the student placed it in "Average." Since the author's categorization of majors is not infallible, it is possible that some errors were made and thus the validity of the study may have suffered. However, in the vast majority of discrepancies between the students' and author's assessments, they differed by at least two categories. In other words, the student placed elementary education in the "Excellent" group, and the author placed it in "Below average/poor." Almost invariably, the students overestimated their employability.

Summary

At this time, a brief summary of the foregoing discussion on the effectiveness of existing CG/CE programs is in order. The majority of respondents felt that their high school career guidance and/or career education programs played no part in their choices of college majors. Fewer than 20% of those students who claimed to have had a CG/CE program in high school felt that the program played even a slight role in their choices of majors. Fewer than 15% of those same respondents indicated that their high school programs had played an important part in their choices of majors.

The majority of students who had changed majors since entering college felt that a better high school CG/CE program would have made the change unnecessary. However, the majority of all the respondents maintained that a better career aid program in high school probably would not have influenced them to choose a major different from the one they chose upon entering college.

Highly significant positive relationships existed in both questions #28A and #29 between the quality of CG/CE received by the students and the likelihood that the students' choice of college major was influenced by his high school program. The better the quality of guidance, the more likely the student was to be influenced. No significant relationships were found between the quality of career aid received and the propensity of the student to: 1) change majors, or 2) believe that a better high school CG/CE program would have averted his change of majors.

It was also shown that the better the quality of the career aid received by the student, the less likely he was to believe that a better high school CG/CE program would have influenced him to choose a different major. This finding tends to indicate that the students who enjoyed high quality career aid programs are more pleased, or at least more satisfied with their chosen majors than the students who received poorer CG/CE/

In the area of employment prospects, no significant relationships were found between the quality of career aid received by the student in high school and: 1) the employment prospects of the student's chosen college major, or 2) the student's personal evaluation

of his understanding of the employment prospects for his major. Similarly, no significant relationship was found between the accuracy of the student's assessment of his employment prospects and the quality of the career aid received in high school. These three findings tend to indicate that the quality of CG/CE received by the student has no effect on the employment prospects of the student's chosen major, the student's evaluation of his perception of his employment prospects, or the accuracy of his assessment of his future employment prospects. In the area of employment prospects, existing career aid programs appear to be sadly ineffective. Students who enjoyed excellent career aid in high school knew no more about their future employment prospects than the students who received no career aid at all.

COMPETENCY OF COUNSELORS IN THE AREA OF CAREER GUIDANCE AND CAREER EDUCATION

Theoretically, the guidance counselor should play an indispensible role in the public school's career guidance and/or career education program. Frequently it is left up to the counselor to devise, implement and administer a school's career aid program. National figures, however, show that all too often guidance counselors are incomeptent in the area of CG/CE; due to ignorance or hostility. In other instances, the guidance counselors rate career aid so low on their list of priorities that they neglect to implement and administer programs. It is the intent of this section of the study to explore the opinions of students, educators, and guidance specialists on the competency of the average guidance counselor in the area of CG/CE.

Mr. Dan Brauer, an O.S.P.I. specialist in guidance, vehemently maintained that most counselors, at least on the high school level, are quite competent in the area of career aid. He pointed out that nearly all college guidance school departments include career development in their curriculums for guidance students.[3]

Mr. Gary Hoffman, former director of the O.S.P.I. Division of Career Education, was more dubious of the average counselor's competency. He stated that he believed a great many counselors are probably not fully aware of, or have a firm grasp or understanding of what the career education concept is. Consequently, they are ignorant of their role or duties in a career aid program. He said that he would not call the counselors incompetent, but he would suggest they might not be fully cognizant of the career education concept. In defense of the counselors, he added that many school administrators, school boards, teachers and even state education officials also do not comprehend the concept of career education. Counselors compose just one group among many which have not yet learned to accept this new theory of education.[4]

Dr. Marla Peterson, director of the OCCUPAC project staff, was very candid in her opinion of guidance counselors. She stated that on the grade school level, where she is most interested, counselors are practically non-existent. On the junior high levels, she stated that not only are most counselors weak in the area of CG/CE, but they are also very hostile to it. Dr. Peterson said that of all the educators she has come into contact with in her work with career education, the people who have fought her most have been guidance counselors. She maintains that they feel threatened by the new concept, for which they

have had no training, and fear that they may be phased out of their jobs.[5]

Dr. Donald Moler, department chairman of the Eastern Illinois University graduate program in guidance and counseling, stated that most guidance counselors are competent in the area of career aid, but oftentimes they are not induced to establish a program. The entire system of education is at fault, according to Moler. High schools are geared to prepare students for college. Colleges and universities require that incoming freshmen have a certain number hours of math, English, foreign language, etc.; thus these institutions actually establish the curriculums for most high schools. High school counselors are urged to attend to the college bound students, to help them in their application and enrollment procedures. Career aid is frequently lost in the shuffle. There is neither room in the curriculum for it nor time in the counselor's schedule. He pointed out that most school boards are disinterested in career education: if the counselor does go to the trouble of establishing a program, he probably will not be rewarded for it. Hence, the incentives for a counselor to instigate a CG/CE program are weak.

Dr. Moler summed up the situation rather well: a guidance student may leave college quite knowledgeable and enthusiastic about career education, but upon entering a high school finds himself in an environment hostile to the concept. If on his own initiative he devises and implements a CG/CE program, it is possible that he will receive no credit for his efforts from the school administrators or the school board. He may also see his efforts thwarted by institutional factors such as union apprenticeship programs.[6]

Dr. Moler is not unsubstantiated in his opinions. In a recent investigation by the National Advisory Council on Vocational Education, it was found that most school guidance counselors were academically oriented and interested mainly in guiding academically able students toward college. Most counselors ignored their responsibilities toward the non-college bound students and knew very little about vocational courses or the jobs they led to.[7] However, in partial defense of the counselors, the council went on to say:

> Although school counselors themselves must bear much of the responsibility for these failures, the council report pointed out there are others who share the blame. Among them are school administrators who downgrade the need for professional counseling and assign counselors to other duties; parents who pressure their children and their children's counselors into pursuing the idea of college attendance to the exclusion of any alternatives; educational institutions that require future counselors to take only one occupational guidance course; the business community that fails to provide school counselors with adequate information of work opportunities; manpower experts who fail to disseminate adequate information to counselors on training programs and on the earnings of program graduates; and labor unions that fail to build close relationships with educational institutions.[8]

Dr. Edson McKee, an instructor in the Eastern Illinois University graduate program in guidance and counseling, had just completed teaching a course entitled, "Occupational, Personal and Social Information," when the author spoke with him. "Occupational, Personal and Social Information" is the only course taught aspiring guidance counselors at Eastern Illinois University which specifically entails career education and career guidance. Dr. McKee said that the course was structured to cover three areas: 1) the theoretical constructs regarding vocational choice (how and why people choose a particular

vocation), 2) the identification, distribution, classification and dissemination of occupational information, and 3) the vocational techniques to be used in counseling and guidance (what are the best ways to implement a career education program?). The students were taught the basic needs required for a CG/CE program and the different ways to implement a program. A sizeable career information library is located in the Clinical Services Building and the aspiring counselors were urged to study it and use it as an example when establishing a similar library in a public school. Career interest and aptitude tests were discussed and the students were taught how to administer and interpret them.

Dr. McKee postulated that the course, "Occupational, Personal and Social Information" was typical of the career guidance courses taught in most universities. He would not comment on the competency of the average counselor in the area of CG/CE, but did say that he felt most future guidance counselors left college with an adequate knowledge and competency in the area.[9]

Questionnaire question #27 asked the student if he felt his high school counselors were competent in the area of career guidance. Fifty-eight (35.2%) of the 165 respondents indicated that they felt their counselors were competent in this area. A majority of 107 students (64.8%) were of the opinion that their counselors were not competent. Dr. Moler pointed out that the validity of the author's survey was questionable since only college students (the cream of the crop) were included. He posited that since these students are in college, their high school counselors must have been sufficiently

competent to help them get in. He further suggested that an equal number of non-college young people should have been polled. The author believes that Dr. Moler made a somewhat valid point. However, there is no proof that the students' high school counselors played any role in their decision to enter college. Also, a full 50% of the respondents to question #17 opined that college bound students received more guidance than non-college bound students. If 64% of the college students, who were supposed to have received more career guidance than their non-college bound counterparts, believed that their high school counselors were not competent in the area in question, then would it not be safe to assume that the non-college bound students would be even more inclined to doubt the competency of their counselors?

Question #27 provoked many student comments. The comments ranged from, "I felt free to talk to my counselor about any problem I had" and "I wouldn't be in college today if it weren't for my high school counselor" to "My counselor was a dumb jock who didn't know anything about guidance." The majority of remarks were negative. Frequently, the comments alluded to the fact that the counselor was a coach or an ex-coach who was more interested in athletics than counseling. Female students often complained that the coaches-turned-counselors would offer more help to the male athletics than to the females. One student remarked that he had repeatedly asked his counselor for career interest and aptitude tests and was refused them. A graduate student was told as a senior in high school by her counselor that she didn't have the "brains" to make it through college.

Repeatedly, students complained that their counselors had steered them into education majors; even freshmen reported this. The most frequent comment was that a counselor was available, but it was up to the student to initiate a counseling session and the session usually proved uneventful. Reports that the counselors were lazy, a joke, not interested in the students and coaches just after the extra money were common. It appears, therefore, from the data and these comments that in the majority of cases, the high school counselors were not adequately performing their duties in the area of CG/CE.

In Chapter II it was found that no significant relationships existed between the students' opinions of the competency of their counselors and: 1) the sex of the students, or 2) the size of the students' high schools. Therefore, the relative competency of the counselors appears to be uniform, at least in reference to the sex of the student and the size of the high school.

THE POSSIBLE IMPROVEMENT OF CG/CE IN RECENT YEARS

All sources consulted, the O.S.P.I. officials, Dr. Marla Peterson, Dr. Moler, Dr. McKee and library sources, agreed that the extent, quality and effectiveness of career education and career guidance programs have appreciably improved over recent years. The sources concurred that the emphasis on career aid has only come to the fore in the last 5-10 years. It is, therefore, the interest of this section of the paper to investigate these purported improvements.

Each student was asked to indicate his age category in the first section of the questionnaire. The age categories listed were: 1) 17-20, 2) 21-24, 3) 25 or over. The questionnaires were then divided into three groups, according to age, so that they might be compared.

Three areas were to be covered in this investigation; 1) possible improvements in the extent of CG/CE programs in public high schools, 2) possible improvements in the quality of the programs, and 3) possible improvements in the effectiveness of the programs.

The best indicators of the extent of CG/CE programs in high schools were the student responses to question #12. Question #12 simply asked the student if his high school had a career guidance program. The student answers to #12, as related to their ages, are exhibited in Table IX below. H_1: no relationship exists, H_2: a relationship does exist. At the 0.05 significance level, with two degrees of freedom, the region of rejection for H_1: a calculated $X^2 \geq 5.99$.

TABLE IX

THE AGE OF THE STUDENT AND THE EXISTENCE OF A HIGH SCHOOL CG/CE PROGRAM, AS EVIDENCED BY THE STUDENT RESPONSES TO QUESTION #12

$\alpha = 0.05$
Region of Rejection for H_1: $X^2 \geq 5.99$

Student Age	Yes	(Expected) (Yes)	No	(Expected) (No)	Total
17-20	118	(109.18)	31	(39.82)	149
21-24	29	(32.97)	16	(12.03)	45
25 or over	12	(16.85)	11	(6.15)	23
	159		58		217

Calculated $X^2 = 9.676$

H_1 Rejected

Table IX shows a strong relationship exists, significant even to the 0.01 level, between the age of the student and the likelihood that his high school had a career aid program. The nature of the relationship can be clearly determined by a brief examination of the data. Seventy-nine and two-tenths percent of the respondents in the 17-20 age category answered affirmatively to question #12. Only 64.4% of the students in the 21-24 category answered affirmatively, and a mere 52.2% of the students in the 25 or over grouping indicated that their high schools offered a career aid program. Clearly, the relationship is of a negative nature. As the age of the student increases, the likelihood that his high school offered a CG/CE program decreases. It seems obvious from the proven relationship and its nature that the extent of career aid programs has indeed increased over the years.

The next area for examination was the possible improvement of the quality of the CG/CE offered over the years. For this investigation the author used stepwise multiple linear regression analysis. The details of the regression were spelled out in the school size differential section of Chapter II. Only a brief discussion of the procedure will be presented here.

One hundred and fifty-seven students were involved in the regression (only those who answered question #12 affirmatively, indicating that their high school did have a CG/CE program). Each student's answers to questions #18B, #19, #20, #21, #22, #23, #24, #25, #26, #27, #29 and #30 were tallied (one point for each affirmative CG/CE answer and no points for a negative answer) to yield a score

on the quality of career aid he received in high school. The better the guidance, the higher the score. That score comprised the dependent variable for each student's data card.

The independent variable in this case was the number of years elapsed since the student graduated from high school. Through the use of these figures, the author could achieve an accurate picture of the year by year changes in the quality of CG/CE offered in Illinois high schools. The years were coded as follows: 1973 = 0, 1972 = 1, 1971 = 2, 1970 = 3, 1969 = 4, 1968 = 5, ...1960 = 13. Only the years 1960-1973 were used because observations prior to 1960 were few and widely scattered. The author expected a negative relationship between the two variables; as the number of years elapsed since the student's high school graduation increased, the quality of the CG/CE received (and hence his quality score) should have decreased.

The computed R^2 for the years since high school graduation variable was only 0.0106. In other words, only a little over 1% of the total variance from the regression line was explained by this variable. The correction matrix showed the relationship, though quite small, to be negative. However, when the F and t tests were run on the data, the R^2 for the independent variable was not significantly different from zero at either the 0.01 or 0.05 level. It can be logically assumed from these results that the quality of CG/CE has not improved appreciably over the years 1960-1973.

The last area to be considered is the possible improvement of the effectiveness of career aid in recent years. Employing the definition of effectiveness that, "A career guidance and career

education program is deemed to be effective if it actually plays a part in the student's choice of an occupation or college major," the student responses to question #28 and #29 appeared to be the best indicators of the effectiveness of the reported programs. To reiterate, question #28 asked the student to indicate all sources which in any way influenced him in his choice of major. Source "A" was labeled "high school career guidance." Hence, if a student marked #28A he was indicating that his high school CG/CE program played a part, either alone or in conjunction with other things, in his choice of major. Question #29 asked the student if his high school career guidance program played an important part in his choice of major. Table X contains the results of questions #28A, #29 and also the results of question #27 (competency of counselor). Question #27 was included as a simple test of whether the age of the student had any relationship to his appraisal of the competency of his high school counselor in the area of career aid.

Table X indicates that first, no significant relationship exists between the age of the student and his perception of the competency of his high school counselor; secondly, no significant relationship exists between the age of the student and the effectiveness of his high school CG/CE program as indicated by the student responses to questions #28A and #29. The findings, from the responses of this sampling of students, show that the effectiveness of high school CG/CE programs has not appreciably improved over the last few years.

Overall, the results of this section intimate three important conclusions. First, the extent or incidence of career aid programs

TABLE X

THE AGE OF THE STUDENT AND THE EFFECTIVENESS OF HIS HIGH SCHOOL CG/CE PROGRAM

$\alpha = 0.05$

Region of Rejection of H_1 (that no relationship exists): $X^2 \geq 5.99$

Question Number	Student Age	Yes	(Expected) (Yes)	No	(Expected) (No)	Total	X^2	H_1 accepted or rejected
27	17-20	47	(44.89)	70	(72.11)	117		
	21-24	9	(11.51)	21	(18.49)	30		
	25 or over	5	(4.60)	7	(7.40)	12		
		61		98		159	1.106	Accepted
		28A Marked	(Expected) (Marked)	28A Unmarked	(Expected) (Unmarked)			
28A	17-20	21	(21.29)	128	(127.71)	149		
	21-24	6	(6.43)	39	(38.57)	45		
	25 or over	4	(3.29)	19	(19.71)	23		
		31		186		217	0.218	Accepted
		Yes	(Expected) (Yes)	No	(Expected) (No)			
29	17-20	15	(15.11)	134	(133.89)	149		
	21-24	4	(4.56)	41	(40.44)	45		
	25 or over	3	(2.33)	20	(20.67)	23		
		22		195		217	0.293	Accepted

has significantly increased over recent years; secondly, the quality of the career aid meted out in the programs is virtually unchanged over the period of years 1960-1973; and thirdly, the effectiveness of the CG/CE programs does not seem to have increased more than a modicum over the last few years.

DIFFERENTIALS AND EFFECTIVENESS

In the last section of Chapter II, three differentials were considered as to the extent of career aid offered a student. Those differentials mentioned were: 1) sex differences, 2) college bound/non-college bound student differentials, and 3) school size differentials. It is the purpose of this section of the paper to explore these differentials in respect to the effectiveness of the career aid offered the student. Only sex and school size differentials will be considered. Since the sampling included only college students, it would be impossible to compare their answers with non-college young people. Hence, the college bound/non-college bound student differential will not be considered.

SEX DIFFERENTIALS

The student responses to questionnaire questions #28A, #29, #31, #32, #35, and #36 were chosen as the best indicators of not only the effectiveness of the CG/CE received, but also of the student's attitudes about the effectiveness of his high school's program.

The data from these questions are in Table XI. Each subtable had only one degree of freedom, therefore it was necessary to employ

the continuity correction in the computation of the X^2 values. At the 0.05 significance level, the region of rejection for H_1 (that no relationship exists) was $X^2 \geq 3.84$. The results of questions #28A and #29 in Table XI show that no significant sex differentials appear to exist in the effectiveness of the high school CG/CE programs. The finding for questions #31 and #32 indicates that the sex of the student plays no part in his propensity to change majors. Finally, the results of questions #35 and #36 show that the sex of the student is not significantly related to his choice of major.

SCHOOL SIZE DIFFERENTIALS

Questions #28A and #29 were again used to determine the effectiveness of the guidance programs. Questions #31 and #32 asked if the student had changed majors and if he thought better high school CG/CE could have averted the change. Lastly, questions #35 and #36 were designed to elicit the student's attitudes about career information and career guidance re his choice of major. The student responses are shown in Table XII.

The results of Table XII indicate that the size of the high school does not influence the effectiveness of its career aid program. No significant relationships were found between school size and #28A (Did career guidance play <u>any</u> part in the student's choice of major) or #29 (Did career guidance play an <u>important</u> part in the student's choice of major). Nor were any relationships found between high school size and the likelihood of the student to have changed majors (#31), or his attitudes about CG/CE and his change of major (#32). Again,

TABLE XI

POSSIBLE SEX DIFFERENTIALS IN THE EFFICACY OF HIGH SCHOOL CG/CE PROGRAMS

$\alpha = 0.05$
Region of Rejection for H_1: $X^2 \geq 3.84$

Question Number	Sex					Totals	X^2	H_1 Accepted or Rejected
		28A Marked	(Expected) (Marked)	28A Unmarked	(Expected) (Unmarked)			
28A	M	16	(11.86)	67	(71.14)	83		
	F	15	(19.14)	119	(114.86)	134		
		31		186		217	2.660	Accepted
		Yes	(Expected) (Yes)	No	(Expected) (No)			
29	M	10	(8.43)	72	(73.57)	82		
	F	12	(13.57)	120	(118.43)	132		
		22		192		214	0.520	Accepted
31	M	29	(28.74)	53	(53.26)	82		
	F	46	(46.26)	86	(85.74)	132		
		75		139		214	0.005	Accepted
32	M	18	(19.08)	9	(7.92)	27		
	F	35	(33.92)	13	(14.08)	48		
		53		22		75	0.359	Accepted
35	M	68	(68.42)	13	(12.58)	81		
	F	106	(105.58)	19	(19.42)	125		
		174		32		206	0.057	Accepted
36	M	30	(31.14)	49	(47.86)	79		
	F	52	(50.86)	77	(78.14)	129		
		82		126		208	0.136	Accepted

TABLE XII

POSSIBLE SCHOOL SIZE DIFFERENTIALS IN THE EFFICACY OF HIGH SCHOOL CG/CE PROGRAMS

$\alpha = 0.05$
Region of Rejection of H_1: $X^2 \geq 7.81$

Question Number	School Size	28A Marked	(Expected) (Marked)	28A Unmarked	(Expected) (Unmarked)	Totals	X^2	H_1 Accepted or Rejected
28A	Under 500	11	(12.58)	80	(78.42)	91		
	500-1500	6	(7.60)	49	(47.40)	55		
	1500-3000	10	(7.05)	41	(43.95)	51		
	Over 3000	3	(2.76)	17	(17.24)	20		
		30		187		217	2.077	Accepted
		Yes	(Expected) (Yes)	No	(Expected) (No)			
29	Under 500	6	(9.23)	85	(81.77)	91		
	500-1500	7	(5.58)	48	(49.42)	55		
	1500-3000	8	(5.17)	43	(45.83)	51		
	Over 3000	1	(2.03)	19	(17.97)	20		
		22		195		217	3.966	Accepted
31	Under 500	31	(32.32)	60	(58.68)	91		
	500-1500	21	(18.82)	32	(34.18)	53		
	1500-3000	17	(17.76)	33	(32.24)	50		
	Over 3000	7	(7.10)	13	(12.90)	20		
		76		138		214	0.529	Accepted
32	Under 500	21	(17.84)	10	(13.16)	31		
	500-1500	9	(12.08)	12	(8.92)	21		
	1500-3000	7	(8.05)	7	(5.95)	14		
	Over 3000	5	(4.03)	2	(2.97)	7		
		42		31		73	4.039	Accepted
35	Under 500	87	(76.04)	8	(12.96)	89		
	500-1500	39	(42.72)	11	(7.28)	50		
	1500-3000	39	(41.01)	9	(6.99)	48		
	Over 3000	17	(16.23)	2	(2.77)	19		
		176		30		206	5.337	Accepted
36	Under 500	30	(31.96)	61	(59.04)	91		
	500-1500	17	(17.21)	32	(31.79)	49		
	1500-3000	19	(15.80)	26	(29.20)	45		
	Over 3000	6	(7.02)	14	(12.98)	20		
		72		133		205	1.416	Accepted

no relationship could be discerned between school size and the student's attitudes about career information and career aid in reference to his choice of major (#35 and #36).

The conclusion drawn from Tables XI and XII show that no discernable sex or school size differentials exist in the effectiveness of high school CG/CE programs.

FOOTNOTES

CHAPTER III

[1]Interview in letter form with Mr. Dan Brauer, Educational Specialist II in Pupil Personnel Section, Office of Superintendent of Public Instruction, Springfield, Illinois. Letter sent out on July 16, 1973.

[2]Interview with Mr. Gary Hoffman, former director of O.S.P.I., Division of Career Education. Springfield, Illinois, July 9, 1973.

[3]Interview with Mr. Dan Brauer.

[4]Interview with Mr. Gary Hoffman.

[5]Interview with Dr. Marla Peterson, Director of the Enrichment of Teacher and Counselor Competencies in Career Education Project (K-6) Eastern Illinois University, August 1, 1973.

[6]Interview with Dr. Donald Molar, Department Chairman of Eastern Illinois University Graduate Program of Guidance and Counseling, Eastern Illinois University, August 10, 1973.

[7]Lawrence Davenport, "Career Guidance: A Call for Change," Manpower, IV (November, 1972), 11.

[8]Ibid.

[9]Interview with Dr. Edson McKee, Instructor in Graduate Program for Guidance and Counseling at Eastern Illinois University, Eastern Illinois University, August 15, 1973.

CHAPTER IV

SUMMARY AND CONCLUSIONS

SUMMARY AND CONCLUSIONS

In section five of Chapter I, seven questions were designated to be answered in the course of the study. It is the purpose of this section of the paper to examine the findings gathered throughout the last two chapters and draw specific conclusions for each of the seven questions.

1. What is the extent of career guidance and career education (quantity, quality and kinds) in Illinois public schools, grades 1-12?

The term "extent" connotes three different types of information: 1) the percentages of schools (at all levels) which have CG/CE programs (or the percentages of students reporting programs in their schools), 2) the various types of guidance available in the programs, and 3) the quality of the career aid actually received by the students.

Official estimates from various sources as to the number of Illinois grade schools with CG/CE programs ranged from as high as 20% to as low as 2-5%. The author found that of the 217 respondents to the student questionnaire, only 6 students (2.8%) reported CG/CE programs in their grade schools. The actual number of grade schools represented by the student sampling is unknown, however, the six

students responding affirmatively were all from different grade schools. If the number of grade schools involved in the study can be estimated to be roughly equal to the number of high schools represented (160), then about 3.75% of the grade schools offered CG/CE programs. If, as official sources reported, the majority of grade school programs have been initiated in the last 3-5 years, then the actual number of programs in existence today should be much higher than indicated by the study. The number of student responses was too small to allow for any valid conclusions to be drawn as to the types of guidance most common. However, personal guidance from a counselor or teacher and the availability of career materials were most frequently indicated. The quality of CG/CE at the grade school level was not considered.

All sources agreed that between 10-15% of Illinois junior high schools offer CG/CE programs. Twenty-three students (10.6%) from 20 junior high schools reported programs. If the number of junior high schools represented are deemed approximately equal to the number of high schools involved, then about 12.5% of the junior high schools offered career aid. This percentage may also be inaccurate if a great many programs have been initiated in recent years.

The number of student responses was too small to formulate any valid conclusions as to the types of guidance programs most common. However, once again, the most frequently reported aid was in the form of personal guidance from a teacher or counselor and the availability of career materials. The quality of CG/CE programs at the junior high level was not considered.

Official estimates of the incidence of career aid programs at the high school level ranged from 25-50%. Over 73% of the students polled reported CG/CE programs in their high schools. Of the 160 high schools represented, 114 (71.3%) reputedly offered career aid in one form or another. These figures indicate that career aid programs are far more predominate than estimated. The most commonly reported forms of career aid were (in descending order of frequency): availability of career materials, personal guidance from a teacher or counselor, diversified occupations programs, and career interest or career aptitude tests. "Career Days" and "College Days" were also frequently mentioned.

It soon became evident from the student responses to the quality of career aid questions that the somewhat extensive existence of CG/CE programs did not insure that the programs were of high quality. Fewer than 60% of those students whose high schools had career aid programs had been informed of the nature of the work in various occupations, the required qualifications for various occupations, the employment prospects for various jobs or warned of saturated occupations. Fewer than 50% of the respondents were given career interest or career aptitude tests, and only about 35% felt that their high school counselors were competent in the area of CG/CE. Approximately 26.1% of those students who had a high school CG/CE program had heard of the Occupational Outlook Handbook. Fewer than 25% of the students with career aid were taught job hunting techniques, and only 8.8% were informed of the geographical areas with the best employment prospects. These figures clearly indicate that the quality of the career aid currently offered in Illinois high schools is sadly lacking.

2. How effective are existing high school career guidance and career education programs in helping students choose a suitable occupation or college major?

The majority of respondents felt that their high school career guidance and/or career education programs played no part in their choice of college major. Only 19.5% of those students whose high schools had CG/CE programs indicated that those programs played any part whatsoever in their choice of major.

Approximately 10% of the total respondents felt that a high school CG/CE program played an important part in their choice of major. However, of the students who actually had CG/CE programs in high school, 13.8% indicated that those programs played an important part in their selections of college majors.

Highly significant positive relationships were found to exist between the quality of the career aid received by the student and the likelihood that the student's choice of college major was influenced by his high school CG/CE program. As stated, the relationship was positive, therefore, the better the quality of guidance, the more likely the student was to be influenced. No significant relationships were found between the quality of career aid received by the student and the propensity of the student to: 1) change majors, or 2) believe that a better high school CG/CE program would have averted his change of of major.

It was also shown that the better the quality of the career aid received by the student, the less likely he was to believe that a better high school CG/CE program would have influenced him to select

a different college major. This finding tends to indicate that the students who had good quality CG/CE programs are now more pleased (or at least more satisfied) that their CG/CE programs were adequate than their counterparts who had poorer CG/CE.

In the area of employment prospects, no significant relationships were found between the quality of the career aid received by the student in high school and: 1) the employment prospects of the student's chosen college major, 2) the student's personal evaluation of his understanding of the employment prospects for his major, and 3) the accuracy of the student's assessment of his employment prospects.

In conclusion, it appears that the high school CG/CE programs involved in this study were for the most part ineffective. In only about 19% of the cases did they play any part whatsoever in the stusents' choice of major. They played an <u>important</u> part in only about 14% of the observations. However, a very strong positive relationship was discovered between the effectiveness of the program and its quality. In fact, 61.5% of the students who received "good" career aid in high school were influenced by it in their choice of major. These findings indicate that when the guidance is of a high quality, it can be very effective. Unfortunately, the "good" career aid category accounted for only about 12% of the students involved in the study. In the area of employment prospects, existing career aid programs appear to be sadly ineffective. Students who enjoyed excellent career aid in high school knew no more about their future employment prospects than the students who received no career aid at all.

3. Does a sex differential exist in the extent and effectiveness of career guidance and career education received by the students at the high school level?

The author found no conclusive evidence of a sex differential. The majorities of the male and female students (78.7% and 82.3%, respectively) believed that career aid was administered equitably to all students, regardless of sex. A relationship was found between the sex of the student and his cognizance of the Occupational Outlook Handbook. The direction of the relationship indicated that the male respondents were more likely to have heard of the Occupational Outlook Handbook than the females. However, opposite relationships were found to exist between the sex of the student and his exposure to career aptitude and career interest tests. In these cases, the female students held an advantage over the males. Overall, no conclusive sex differential was found in either the extent or quality of the career aid received by the students.

Similarly, no significant sex differential was found in the effectiveness of the career aid received by the students. It can be concluded from these findings that no significant sex differential existed in either the extent or effectiveness of the career guidance and the career education received by the students in the survey.

4. Does a school size differential exist in the extent and effectiveness of career guidance and career education received by the students at the high school level?

The data revealed a significant relationship between school size and the existence of CG/CE programs. The relationship was

determined to be positive, indicating that the larger the size of the school, the more likely it was to have a career aid program. However, no relationship was found between the quality of the career aid offered and the size of the high school. In other words, larger schools are more likely to offer a career aid program, but the program will probably not be appreciably different in quality from a program offered by a smaller school.

No significant relationships were uncovered between the size of the high school and the effectiveness of the career aid received by the students. The general conclusion can be drawn that the size of the high school was related to the existence of a career aid program, but no school size differential existed between the quality or effectiveness of the career guidance or career education received by the students in the survey.

5. Does a college bound/non-college bound student differential exist in the extent and effectiveness of career guidance and career education received by students at the high school level?

A full 50% of the student respondents said the college bound students received more career aid than the non-college bound students in their high schools. A little over 41% of the respondents indicated that all students received the same guidance, while 8.7% claimed that the non-college bound students received more guidance than their college bound counterparts. Although no conclusive deductions can be drawn to resolve the question, it is significant that fully 58.7% of the respondents felt a differential of some nature did exist. The author was forced to speculate and agree with the dominant national conjecture

that in many cases, college bound students do indeed receive considerably more career aid than their non-college bound counterparts.

The investigation of a possible differential in respect to the efficacy of the CG/CE received by both groups was precluded since only college bound students were involved in the survey.

6. Are public high school counselors competent in the areas of career guidance and career education?

The question of counselor competency was very difficult to answer. Several sources pointed out that the counselor may be deemed incompetent in the area of CG/CE, when in truth, he is merely a prisoner of circumstance. The fault may well lie with the school board and administration. It is often these individuals who do not understand or agree with the concept of career guidance and hence do not induce or allow the counselor to implement a program. Institutional factors, such as labor union apprenticeship requirements, may render career education and subsequent vocational education programs ineffective.

Other sources, however, claimed that most counselors are not competent, and may even be hostile to the concept of CG/CE. Some experts felt that many counselors are not trained in CG/CE, do not understand the concept, and thus feel threatened by it.

One course is taught in the Eastern Illinois University graduate school in guidance and counseling which specifically entails career guidance and career education. The course outline appears to contain the basic elements the average high school counselor should know about career aid. The instructor postulated that this course was typical of those taught at other Illinois universities.

Fifty-eight (35.2%) of the 165 respondents to the student questionnaire indicated that they felt that their high school counselors were competent in this area. A majority of 107 students (64.8%) disagreed. The majority of student comments on this subject were quite negative.

The author was forced to conclude that the majority of counselors in the survey were not adequately performing their duties in respect to career aid. New counselors coming out of college appear to be fairly well versed in career education and career guidance, however, Eastern Illinois University has only included a course entailing CG/CE in its guidance and counseling curriculum for the last four years. Hence, the great preponderance of counselors in public schools who graduated from college more than four years ago have probably had no formal classroom course on career aid. If one agrees with the theory that career aid is not emphasized by school boards or administrations, and thus these forces are responsible for the counselors' impotence, it is of little consequence. No matter what the circumstances of the administration of a school, the counselor is not adequately performing his duties if he is offering the students no career guidance or career education. The frequent student comment that the counselor, often an ex-coach, was available, but it was up to the student to initiate a guidance session (which usually proved uneventful) may well be indicative of the majority of guidance counselors in Illinois today.

7. Have career guidance and career education programs improved appreciably in extent, quality, or effectiveness in recent years?

All sources consulted concurred that career guidance and career education programs have improved in recent years. The author's findings did not entirely agree.

A significant relationship was found between the ages of the students and the existence of high school career aid programs. The relationship was determined to be negative, thus indicating that as the age of the student increased, the likelihood that his high school offered a CG/CE program decreased. These findings lead to the conclusion that the extent of career aid programs has increased in recent years.

No relationship was found between the years elapsed since the student graduated from high school and the quality of the CG/CE he received. Nor was any significant relationship discerned between the age of the student and the effectiveness of the career aid he received.

Hence, the author concluded that the incidence of career guidance and career education programs has increased in recent years, but the quality and effectiveness of said programs have not appreciably improved.

Hypotheses

The first hypothesis, that career education and career guidance programs in Illinois public schools, grades 1-12, are adequate in extent (existence, quality and kinds) to prepare students for entry into the labor market was rejected. To be adequate, every school should have a career aid program. It was found from the survey of students that fewer than 5% of the grade schools involved offered

CG/CE programs. Fewer than 15% of the junior high schools, and fewer than 75% of the high schools represented in the study offered career aid in one form or another.

The kinds of programs most often reported were good. However, for a career education or career guidance program to be entirely adequate, each characteristic listed should have been indicated by each student.

Lastly, the quality of the CG/CE actually received by the students in high school was generally poor. Only 36.9% of all the respondents received what the author deemed adequate career aid.

The second hypothesis, that career education and career guidance programs in Illinois public high schools are adequate in effectiveness in influencing young people in their choice of occupation or college major, was also rejected. It was found that of the 159 respondents who actually had career aid programs in their high schools, only 31 students (19.5%) felt that their high school CG/CE program had played <u>any</u> part whatsoever in their choice of college major. Hence, 80.5% of the programs reported were deemed ineffective, by definition.

CHARATERISTICS OF GOOD CG/CE

Mr. Brauer, Mr. Hoffman and Dr. Peterson were each asked to describe those characteristics most essential for a good career aid program at each educational level.

GRADE SCHOOL 1-6

The primary goal of a career education program at the grade school level is to simply acquaint the student with the world of work. "Hands-on" experience is stressed at this level; touching the tools of various jobs, occupational role playing, etc. Students should learn to grasp the work ethic and understand that a man is given money in exchange for labor. These are the important objectives at the kindergarten and grade school level. To best achieve these objectives, the following aspects of a career education program are stressed.

1. Career education in the classroom. It is important that career education be included in the daily exercises much the same as grammar and math. When the students read about a farmer, the instructor should spend time explaining the type of work a farmer does and how he earns a living. The number of hours he works per day, the types of machinery he uses, the way he plants his crops, etc., should be discussed.[1]

2. Personal guidance from a counselor or teacher. Each student should be observed by a counselor of teacher. If a student seems unusually interested in a particular area, then the counselor or teacher should provide additional information about that area. It is not the purpose of the program to guide the student into one particular occupation at this level. However, by learning the importance of work in one occupation, the student thereby gains insight into all areas.[2]

3. Career materials made available. Audio visual materials are most highly recommended for this age group. Films about work, illustrated books and recordings are all excellent career development

aids.[3] Other suggestions include class field trips to factories, farms, etc., and guest lecturers from various occupations.

4. Career aptitude and career interest tests. Each student should be given a battery of aptitude and interest tests each year in order to discern the direction of his interests and also to determine if he is becoming acquainted with the values of work.[4]

A new and highly acclaimed career educational aid is OCCUPAC. An OCCUPAC is a package of multi-media materials which presents career development activities at a level which can be comprehended by students in grades K-9. OCCUPACs contain slides, tapes, equipment and materials used in various occupations, decision-making stimulation activities, and props of all kinds from the real world of work.[5] The OCCUPAC project is administered through the center for Educational Studies, Eastern Illinois University. Dr. Marla Peterson is the director. Each OCCUPAC box contains a cassette tape recording, some tools associated with a particular occupation and an instruction sheet for the teacher. A student can put on the tool belt of an electrician, listen to his duties and even perform simple electrical tasks. In this way the student is initiated to the world of work. OCCUPAC professions include retail sales clerk, grain elevator manager, chef/cook; over 25 in all. Through OCCUPAC, students at the elementary level can receive adequate career education for a small price.

JUNIOR HIGH 7-9

The primary goal at the junior high level is again to merely acquaint students with the world of work. At this level the students

are urged to explore broad occupational clusters. The medical occupational cluster includes doctors, nurses, anethetists, orderlies and dental assistants, just to name a few. Each job is different, but all are related to medicine in some way. The following characteristics are suggested for a career education program at the junior high level.

1. Career education in the classroom. This is essentially the same as the grade school program, only at this level the students should be assigned to write reports on various occupational clusters. It is also urged that the reports be read aloud in class or assembled in notebooks.

2. Personal guidance from a teacher or counselor. Again, students should be urged to investigate occupational areas for which they show a high aptitude or interest.

3. Career materials made available. Audio visual materials are again recommended, only of a more sophisticated nature than those used in grade schools. Skits involving the exchange of money or problems of work are suggested. Dr. Marla Peterson even suggested a skit depicting a union strike, with some students as management and some as labor.

4. Career aptitude and career interest tests. These tests are especially stressed at the junior high level. It is at this time that students are beginning to plan their high school majors. If the student is aware of his aptitudes and interests, he can more effectively plan for high school.[6]

HIGH SCHOOL 10-12

The goals of a CG/CE program at the high school level are threefold. First, the student should again be informed of the natures, required qualifications and employment prospects for various occupations; second, the student should be steered into the occupational cluster for which he shows the greatest aptitude and interest; third, the student should be trained, either in academic or vocational classes, in the skills required for his chosen occupational cluster. It should be carefully noted at this point that no student should be trained or educated for any one particular occupation. Interests are too unstable at the high school level to allow for any permanent occupational choices to be made. Every student should receive some vocational and some academic preparation. All too frequently, college bound students find themselves not in college but in the labor market; armed only with Algebra and Biology. Conversely, high school students who had no intentions of continuing their education often find themselves in college in later years.

Mr. Hoffman and Mr. Brauer were asked to rank the following characteristics of high school CG/CE programs as to their order of importance.

Hoffman	Brauer		
2	6	A.	Formal classroom course in CG/CE Required? Optional?
1	1	B.	Personal guidance from a teacher or counselor
5	7	C.	Career aptitude and career interest tests
4	4	D.	Career materials made available
3	5	E.	Diversified occupation program
6	2	F.	Advisement committee using local businessmen and labor leaders
7	3	G.	High school job placement program

Each of these characteristics were stressed as highly desirable for a high school program. However, as can be seen, the two state officials do not agree on their relative importance.

Mr. Hoffman stated that he supported a curricular approach to career aid (the teaching of CG/CE in the classroom). Mr. Brauer was more in favor of career aid being administered by the counselor and in special sessions. At any rate, the above seven characteristics are essential to an adequate CG/CE program.

In conclusion, the individual goals and characteristics of career aid programs at the three educational levels differ somewhat. However, one overriding objective is the basis for all programs; to better prepare students for ultimate employment.

Other Sources of CG/CE in Illinois

Public school systems are not the only sources of career aid in Illinois. The state employment service and federal government manpower projects such as the W.I.N. (Work Incentive Program) and P.E.P. (Public Employment Program) programs, among others, also offer valuable career aid. Many men and women also receive career education, career guidance and career training while in the armed services.

These other sources are desirable and offer valuable career information, however, only a very small percentage of the total population ever avails itself of these services. Questionnaire question #37 asked the students to indicate other sources from which they had received career guidance. Sixteen students (7.5%) of the 214 respondents indicated they had received career aid from a source other than

school. Two students were counseled by the military, three by the state employment service, none by a government training program and 12 from various other sources. Other sources included private employment agencies, ministers and one direct "vision from God." Obviously, non-school guidance services are not affecting the majority of the population. On the other hand, every American must attend school until his middle teens. Therefore, if career guidance and career education are to be administered to the population as a whole, it seems most logical to do it through the public schools.

PERSONAL RECOMMENDATIONS

During the course of the study the author ideated several suggestions which might improve future career aid programs.

1. Career education and career guidance programs should be comprehensive, beginning in kindergarten and continuing through grade 12. The comprehensive program should maintain a continuity in the objectives strived for, through each educational level. The sophistication of the program should increase as the student ages, with career education as the primary consideration in grade school, yielding to career guidance in high school.

2. All school counselors should be required to return to college for at least one course in the concepts and implementation of career guidance and career education. Regular workshops should also be held, not only for the benefit of counselors, but also for teachers.

3. School counselors should cease their emphasis on emotional and academic guidance and turn part of their efforts toward career guidance. Emotional, academic and career guidance are all equally important, no one area should be neglected.

4. Teachers and counselors should begin to combine their efforts to work as a team in the career education process. Petty bickering and competition over who is responsible for teaching this area serves only the purpose of confusing the students.

5. Local businessmen and labor leaders should be enlisted to participate in the program. First-hand information from these members of the working world is better than descriptions and statistics found in books. Diversified occupations and work study programs are essential.

6. Schools should work more closely with other sources of career aid. School should join forces with the state employment office, government manpower-related agencies and unions. In this manner, improved transitional adjustments can be made between school and work.

7. A single, comprehensive curriculum policy including a precise set of guidelines should be established by state school officials. It is obvious why school administrators do not know what the state recommends in the area of CG/CE. At this time no unanimous or even standard recommendations exist. A culmination of opinions from all sources should be used to devise the general curriculum policy. Then a single state agency should be given sole control over the administration of said policy. In this manner, wasteful duplication of services and contradictory guidelines and requirements could be avoided.

8. Great care should be taken to avoid locking a student into a particular occupation. Teachers and counselors should guide or steer students towards particular occupations for which they show a high aptitude and interest, but students should never be forced into one area and educated solely for a single occupation. Career interests are too flexible for a student to make a permanent vocational selection while still in high school.

9. Finally, the negative attitudes of school boards, administrators, counselors, teachers, parents and even the students regarding career guidance and career education must be changed. As long as these individuals consider career aid only valuable for students financially or intellectually unable to attend college, adequate implementation will never take place. The stigma that links career education to vocational education, as only applicable to eventual "failures," must be removed.

CONCLUDING STATEMENTS

The development of the areas of career education and career guidance is not being neglected. Nationally, millions of dollars are being spent specifically for the research and development of CG/CE programs. Similarly, Illinois is spending thousands in this area. Presently, Illinois is number one in the nation in research and development of CG/CE programs. Comprehensive R and D projects are being funded at Eastern Illinois University, Northern Illinois University, Southern Illinois University and the University of Illinois.

The Eastern Illinois University OCCUPAC program, originally funded by the State Division of Vocational and Technical Education, is now directly funded by the federal government to the tune of $250,000 per annum. Peoria School District #51 is the only school system in the nation that is directly funded by the federal government for the development of a career aid program.[7]

The future looks promising for the eventual implementation of a comprehensive K-12 CG/CE program in every school system. It will take many years to establish said programs and many millions of tax dollars, but the end results should more than outweigh the costs. If unemployment and underemployment can be decreased even by 25%, and worker dissatisfaction (which results in absenteeism, high turnover rates and industrial sabotage) decreased by a similar degree, then the money, time and effort will be well spent.

Suggestions for Future Research

To derive more significant results, a study should be done in existing grade schools, junior highs and high schools. The data received by the author was at least one month out of date, and in most cases, many years. A study of students currently in the various educational levels would give a more accurate picture of existing guidance programs.

Another suggestion would be to take a significant sampling of all the students in all the public schools in Illinois. The author's sampling of students was much too small to allow for any valid conclusions. However, through a more ambitious study which surveyed a significant sampling of Illinois students, valid extrapolations to the state as a whole cound be made.

FOOTNOTES

CHAPTER IV

[1]Interview with Dr. Marla Peterson, Director of the Enrichment of Teacher and Counselor Competencies in Career Education Project (K-6) Eastern Illinois University, August 1, 1973.

[2]Ibid.

[3]Ibid.

[4]Interview with Mr. Gary Hoffman, former director of O.S.P.I., Division of Career Education. Springfield, Illinois, July 9, 1973.

[5]Dr. Marla Peterson, "Elementary School Career Education Curriculum Development: An Evolving Phenomena," Eastern Illinois University, 1972, (Pamphlet).

[6]Interview with Mr. Gary Hoffman.

[7]Interview with Dr. Marla Peterson.

APPENDICES

APPENDIX A

CAREER GUIDANCE STUDENT QUESTIONNAIRE

CAREER GUIDANCE STUDENT QUESTIONNAIRE
Estimated time -- 10 min.

This questionnaire is a major research source for the thesis of a graduate student in the Economics Department. The nature of the thesis is to determine the extent and adequacy of career guidance in Illinois public schools (grades 1-12). It is hoped that the published results of this study will contribute to improved career guidance for students in the future. A high response is essential to the success of this study, so please take a few minutes and fill it out. Your cooperation will be greatly appreciated!

When the questionnaire is completed, please deposit it at the main desk in your dorm. Please complete it and turn it in at your earliest convenience, but no later than Thursday, July 19.

1. Age: (circle one) 1) 17-20 2) 21-24 3) 25 or over
2. Sex: M F
3. Class: Frosh Soph Jr Sr Grad
4. Major: (be specific) _____
5. Name and location of high school from which you graduated:
   _____
6. Size of high school: 1) under 500 2) 500-1500 3) 1500-3000 4) over 3000
7. Year of high school graduation: _____

DEFINTIION OF CAREER GUIDANCE: The steering of students into occupations for which they are well suited (both in aptitude and interest), and occupations with good future employment prospects. It should

include career education, which entails the education of students as to the natures of various occupations, the required qualifications for various occupations and the employment prospects of various occupations. It is not to be mistaken for vocational education, such as shop, agriculture, Home-Ec., etc.

The following questions pertain only to career guidance, not to emotional or class scheduling guidance or counseling.

8. Did your grade school have a career guidance program? Yes No
(if no, go on to #10)
If yes, name and location of grade school: _____

_____

9. Was the program in the form of: (indicate all that are applicable)

A. Formal classroom course -- was it 1) required or 2) optional?
B. Personal guidance from a counselor or teacher.
C. Career materials made available.
D. Career aptitude or career interest tests.
E. Other _____

Comments: _____

10. Did your jr. high school offer a career guidance program? Yes No
(if no, go on to #12)
If yes, name and location of jr. high: _____

_____

11. Was the program in the form of: (indicate all that are applicable)

A. Formal classroom course -- was it 1) required or 2) optional?
B. Personal guidance from a counselor or teacher.
C. Career materials made available.
D. Career aptitude or career interest tests.
E. Other _____

Comments: _____

12. Did your high school have a career guidance program? Yes No
(if no, go on to #28)

13. Did your high school offer career guidance in the form of:
(indicate all that are applicable)

A. Formal classroom course -- was it 1) required or 2) optional?
B. Personal guidance from a counselor or teacher.
C. Career materials made available.
D. Career aptitude or career interest tests.
E. Diversified occupations program (students work part of school day in an occupation)
F. High school job placement service.
G. Other _____

Comments: _____

The following questions pertain to high school career guidance programs.

14. If you personally did not receive career guidance, was it available to other students in your school? Yes No

Comments: _____

15. If you are female, did you receive more or less guidance than the males? 1) more 2) less 3) same

Comments: _____

16. If you are male, did you receive more or less guidance than the females? 1) more 2) less 3) same

Comments: _____

17. Did the college bound students receive more or less guidance than the non-college bound students? 1) more 2) less 3) same

Comments: _____

18. Have you ever heard of the Occupational Outlook Handbook? Yes No

Was it made available to you in high school? Yes No

19. Were you informed about the nature of the work in various occupations? Yes No

Comments: _____

20. Were you informed of the required qualifications for various jobs? Yes No

21. Were you informed of job prospects in various occupations? Yes No

Comments: _____

22. Were you informed of saturated occupations? (where a surplus of labor already existed) Yes No

23. Were you ever given career aptitude tests to discern which occupations you were best suited for? Yes No

Comments: _____

24. Were you ever given career interest tests to discern which occupations you were most interested in? Yes No

Comments: _____

25. Were you informed of the geographic areas with the best employment prospects? Yes No

26. Were you taught job hunting techniques? (how to find a job, how to act at an interview, etc.) Yes No

Comments: _____

27. Do you feel your high school counselors were competent in the area of career guidance? Yes No

Comments: _____

28. How did you select your college major? (indicate all that are applicable)

A. High school career guidance.
B. Parental influence.
C. College career guidance.
D. Influence of friends.
E. Stumbled into it.
F. Other. _____

Comments: _____

29. Did your high school career guidance program play an important part in your choice of college major? Yes No

30. Were any of your friends helped in choosing their occupations or majors by career guidance? Yes No

Comments: _____

31. Have you changed majors since you entered college? Yes No
Why? _____

_____

32. Do you think a better high school career guidance program would have made a change of college major unnecessary? Yes No

Comments: _____

33. How do you evaluate your understanding of the employment prospect for your major? 1) good understanding 2) fair 3) poor

34. What do you think the employment prospects for your major are?

A. Excellent
B. Good
C. Average
D. Below average
E. Poor
F. Don't know

Comments: _____

35. If you had known what you know now about employment prospects, working conditions, etc., for you major, would you have chosen the same major? Yes No

36. Do you believe better career guidance in high school would have influenced you to choose a different major than you chose when you entered college? Yes No

37. Have you received career guidance from a source other than school? Yes No If yes, was it (indicate all that apply)

A. Military
B. State employment service
C. Government training program
D. Other _____

Comments: _____

38. Name and phone number: _____ _____
(Your name and phone number are optional -- but would be very helpful for a follow-up study).

If you think your school had an especially good career guidance program and you would like to describe it, or have any general comments on career guidance, use the back of this sheet, your consideration will be appreciated.

THANK YOU FOR YOUR COOPERATION!

APPENDIX B

DAN BRAUER QUESTIONNAIRE

University Apt. #66
South 4th Street
Charleston, Ill. 61920
July 16, 1973

Mr. Dan Brauer
Pupil Personnel Section
316 South 2nd Street
Springfield, Illinois 62706

Dear Mr. Brauer,

I would like to thank you at this point for your time and consideration. I know you are a very busy man and I sincerely appreciate your help.

My thesis is a study of the extent and effectiveness of carrer guidance/career education in Illinois public schools, grades 1-12. I define career guidance as follows: "the steering of students into occupations for which they are well suited (both in aptitude and interest), and occupations with good future employment prospects. It should also include career education, which entails the education of students as to the natures of various occupations, the required qualifications for various occupations, and the employment prospects for various occupations."

I believe there is a strong distinction between career guidance/career education and vocational education. Please keep the preceeding definition in mind when answering the following questions. Thank you once again for your cooperation.

Sincerely yours,

Kenneth G. Prillaman

Kenneth G. Prillaman
Univ. Apt. #66
South 4th Street
Charleston, Ill. 61920

Mr. Dan Brauer
Pupil Personnel Section
316 South 2nd Street
Springfield, Ill. 62706

Please attach additional papers where necessary.

1. What is your exact title?

2. Is there any standard curriculum policy from the O.S.P.I. which includes career guidance/career education?

3. Does your dept. have any specific guideposts for schools to follow in respect to career guidance or career education?

4. Are there any special funds available for CG/CE programs? Where do the funds come from?

How much do these funds allow per student?

Are most funds for CG/CE still funnelled through vocational ed.?

5. How much money is being spent on CG/CE in Illinois, total?

How much per student?

6. How many grade schools in the state have CG/CE programs? (estimate)

What % of grade schools have programs? (estimate)

How long have these programs existed? (estimate)

What types of programs are most common?

7. I would like the names and addresses of grade schools with especially good programs, for follow-up studies.

a. _____

b. _____

c. _____

d. _____

e. _____

8. What things do you think a good CG/CE program for a grade school should entail? (indicate all that are applicable)

   A. Career aptitude and career interest tests

   B. Personal career guidance from teachers or counselors

   C. Formal classroom course in CE: should it be optional or required?

   D. Career materials made available (OCCUPAC or Occupational Outlook Handbook, etc.)

   E. Other: _____

   F. Other _____

Comments: _____

_____

_____

9. Have you heard of Marla Peterson's "OCCUPAC"?

   What is your opinion of it?

10. Do you know of any other experimental CE programs for grade schools?

    Could you describe them or give me the name and addresses of the originators?

11. How many Jr. High schools in the state have CG/CE programs? (estimate)

    What % of Jr. Highs have programs? (estimate)

    How long have these programs existed? (estimate)

    What types of programs are most common?

12. Could you give me the names and addresses of Jr. Highs with especially good CG/CE programs so that I might contact them?

    a. _____

    b. _____

    c. _____

    d. _____

    e. _____

13. What things do you think a good CG/CE program for a Jr. High should entail? (indicate all that are applicable)

    A. Career aptitude and career interest tests

    B. Personal guidance from teachers or counselors

    C. Formal classroom course in CE: should it be optional or required?

    D. Career materials made available

    E. Other _____

    F. Other _____

Comments: _____

_____

_____

14. How many high schools in the state have CG/CE programs? (estimate)

    What % of high schools have programs?

    How long have these programs existed?

15. What kind of programs are most common?

16. What should a good high school CG/CE entail?

A. Formal classroom course in CG/CE required? optional?

B. Personal guidance from teachers or counselors

C. Aptitude and interest tests

D. Career materials made available

E. Diversified occupations program (students actually observe or work in occupations part of school day)

F. Students taught job hunting techniques

G. High school job placement program

H. Advisement committee using local businessmen and labor leaders

I. Other _____

J. Other _____

Comments: _____

_____

_____

17. In what ways should a high school CG/CE program differ from a grade school or Jr. High program?

18. What are the names of the best career aptitude tests you recommend?

a. _____

b. _____

c. _____

d. _____

19. What are the names of the best career interest tests you recommend?

a. _____

b. _____

c. _____

d. _____

20. What career materials do you think a good high school program should make available to the students?

a. _____

b. _____

c. _____

d. _____

e. _____

21. Could you give me the names and addresses of high schools with especially good CG/CE programs, so that I may contact them?

a. _____

b. _____

c. _____

d. _____

e. _____

22. How much money per student per year do you think a good career guidance program would cost for a high school? (estimate)

for a Jr. High?

for a grade school?

23. On the average, do you think girls receive more, less or the same career guidance in high schools than the boys?

24. Do you think college bound students receive more, less, or the same career guidance than non-college bound students?

25. Do you think there is a large school/small school differential in the quality of career guidance/career education programs?

26. In your opinion, are most high school guidance counselors competent in the area of career guidance?

    Why or why not?

27. Do you think the average existing career guidance program (high school) is adequate both in extent and effectiveness to prepare young people for entry into the labor market?

    Why or why not?

28. Do you know the titles of any studies made to test the effectiveness of career guidance or career education programs?

29. Do you think career guidance is as important as emotional or class scheduling guidance?

    More Less Same

    Why?

30. What changes would you like to see initiated to improve future career guidance and career education programs?

31. Please rank the following in order of importance to an effective career guidance/career education program. (your opinion)

_____A. Formal classroom course in CE: required? optional?

_____B. Personal guidance from a teacher or counselor

_____C. Career aptitude and career interest tests

_____D. Career materials made available (i.e., Occupational Outlook Handbook)

_____E. Diversified occupations (student actually observe or work in occupations part of the school day)

_____F. Advisement committee using local businessmen and labor leaders

_____G. High school job placement program

_____H. Other _____

_____I. Other _____

Comments _____

General comments about career guidance/career education:

Mr. Brauer: Thank you once again for your help and consideration. If your department has any published pamphlets which it gives to the public, I would greatly appreciate copies of them. I wish to apologize for the length of this questionnaire, but the information is essential to the success of my thesis. Thank you again!!

APPENDIX C

REPORTED COLLEGE MAJORS AS CATEGORIZED BY FUTURE EMPLOYMENT PROSPECTS

Excellent

Marketing
Accounting
Medical Technology
Nursing
Dietetics
Recreation
Speech Pathology
Computer Science
Media

Above Average

Special Education
Economics
Home Economics
Business Administration
Health
Environmental Biology
Industrial Technology
Sociology
Pharmacy
Guidance and Counseling
Industrial Arts Education
Optometry

Average

Home Economics Education
Zoology Education
Biology Education
Botany Education
Chemistry Education
Physics Education
Art Education
Business Education
Foreign Language Education
Geography
Management
Music Education
Music
Mechanical Engineering
Educational Administration
Library Science
Health Education
Elementary Education/Specialist Education
Speech Education
Finance

Below Average/Poor

Elementary Education
Physical Education
Math Education
History Education
Social Science
Political Science
Art

BIBLIOGRAPHY

Aun, Emil Michael. "Remodeling the Employment Service." Manpower, IV (July, 1972), 16-22.

Berg, Ivar. Education and Jobs: The Great Training Robbery. New York: Praeger Publishers, 1970.

Boisseau, Peter. "Telling the Employment Service Story." Manpower, V (April, 1973), 9-14.

Bryant, Edward C. Statistical Analysis. 2nd. ed. New York: McGraw-Hill Book Company, 1966.

Burkett, Lowell A. "Career Education: How Do Others Interpret the Concept?" American Vocational Journal, XLVII (March, 1972), 9-10.

Campbell, Calvin. "The Students' Conception of the Informational Services Junction at the High School Level." Unpublished thesis. Eastern Illinois University, 1972.

"Career Preparation for Everyone." The Vocational Guidance Quarterly, XX (March, 1972), 183-187.

Cochran, John R. and Herman J. Peters, eds. Guidance: An Introduction-Selected Readings. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.

Darcy, Robert L. "A Classroom Introduction to the World of Work." Occupational Outlook Quarterly, XV (Winter, 1971), 23-26.

Davenport, Lawrence. "Career Guidance: A Call for Change." Manpower, IV (November, 1972), 11-14.

Ginzberg, Eli. "A Critical Look at Career Guidance." Manpower, IV (February, 1972), 3-6.

Harris, Edwin F. "Making Every Opportunity Count." Manpower, IV (September, 1972), 36-40.

Haygue, Howard. "Employment of High School Graduates and Dropouts." Washington, D. C., 1970. (Pamphlet of the U. S. Department of Labor, Bureau of Labor Statistics. Special Report 121).

Herrick, Neal Q. "Who's Unhappy at Work and Why." Manpower, IV (January, 1972), 3-7.

Interview in letter form with Mr. Dan Brauer, Educational Specialist II in Pupil Personnel Section, Office of Superintendent of Public Instruction, Springfield, Illinois. Sent out on July 16, 1973.

Interview with Mr. Gary Hoffman, former director of O.S.P.I., Division of Career Education. Springfield, Illinois. July 9, 1973.

Interview with Dr. Edson McKee, Instructor in Graduate Program for Guidance and Counseling at Eastern Illinois University. Eastern Illinois University, August 15, 1973.

Interview with Dr. Donald Moler, Department Chairman of Eastern Illinois University Graduate Program of Guidance and Counseling. Eastern Illinois University, August 10, 1973.

Interview with Dr. Marla Peterson, Director of the Enrichment of Teacher and Counselor Competencies in Career Education Project (K-6). Eastern Illinois University, August 1, 1973.

Isaacson, Lee E. Career Information in Counseling and Teaching. 2nd. ed. Boston: Allyn and Bacon, Inc., 1971.

Levitan, Sar A., Garth L. Mangum and Ray Marshall. Human Resources and Labor Markets: Labor and Manpower in the American Economy. New York: Harper and Row, Publishers, 1972.

Lovell, Malcom R., Jr. "Let's Cure Job Unreadiness." Manpower, IV (February, 1972), 26-32.

Marland, Sidney P., Jr. "Career Education: Every Student Headed for a Goal." American Vocational Journal, XLVII (March, 1972), 34-36.

Marland, Sidney P., Jr. "Career Education Now." The Vocational Guidance Quarterly, XX (March, 1972), 188-192.

Miller, Carroll H. Foundations of Guidance. New York: Harper and Row, Publishers, 1961.

"Occupational Outlook for College Graduates." Washington, D. C. 1972-1973. (Bulletin of the U. S. Department of Labor, Bureau of Labor Statistics, No. 1730).

Patterson, Cecil H. The Counselor in the School: Selected Readings. New York: McGraw-Hill Book Company, 1967.

Peterson, Marla. "Elementary School Career Education Curriculum Development: An Evolving Phenomena." Eastern Illinois University, 1972. (Pamphlet).

Peterson, Marla. "OCCUPAC-An Approach for Presenting Simulated Career Development Experiences." Eastern Illinois University, 1972. (Pamphlet).

Peterson, Marla. "OCCUPACs for Hands-On Learning." American Vocatioanl Journal, XLVII (January, 1972), 40-41.

Placement Office Annual Report. Eastern Illinois University. School year 1971-1972.

Research Division-National Education Association. "Educational Attainment." Research Report-1971: Rankings of the States, 1971. Washington, D. C., 1971.

Robertson, Von H. ed. Career Counseling. Chicago: American Technical Society, 1968.

Roman, Robert J. and Jama L. Doenges. "Career Week at McTigue Junior High." American Vocational Journal, XLVI (September, 1971), 62-63.

Super, Donald. The Psychology of Careers. New York: Harper and Brothers, 1957.

U. S. Bureau of the Census. Statistical Abstract of the United States: 1972. 93 ed. Washington, D. C., 1972.

U. S. Department of Labor. Manpower Report of the President. Washington, D. C., March, 1972.

Weathersby, George B. "Educated Manpower and National Goals." Manpower, IV (October, 1972), 9-13.

Worthington, Robert M. "Why Career Education?" School Shop: Industrial-Technical Education, XXXI (March, 1972), 137-139.

Yamane, Taro. Statistics-An Introductory Analysis. 2nd. ed. New York: Harper and Row, Publishers, 1967.